

HISTORICAL EVALUATION OF THE DELTA WATERWAYS

FINAL REPORT

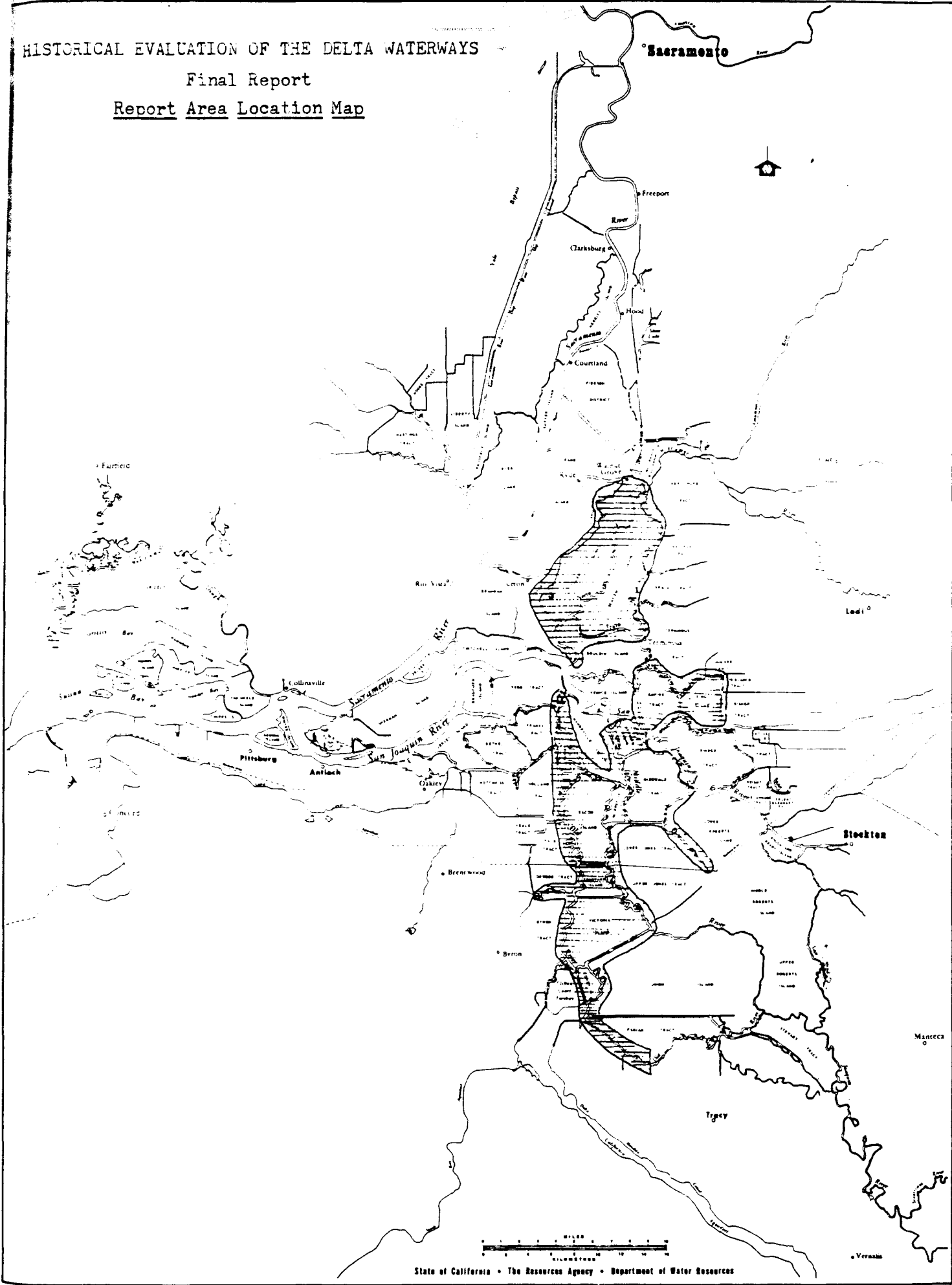
Alan M. Paterson  
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Prepared for the State Lands Commission  
pursuant to Contract LC-7746

December 1978

# HISTORICAL EVALUATION OF THE DELTA WATERWAYS

## Final Report Report Area Location Map



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## INTRODUCTION

The California State Lands Commission received a grant from the United States Department of Commerce, Economic Development Administration, to remove navigation hazards from portions of the Sacramento-San Joaquin Delta using a mobile crane mounted on a barge. Many of the objects to be removed were natural, such as trees and snags in the waterways. However, in the case of man-made objects scheduled for removal, the terms of the Federal grant required a historical analysis to determine whether or not the object(s) should, in fact, be removed. Those objects or sites found to have important historic values were to be identified and left undisturbed by the hazard removal operation. "Historic value" was defined in terms of a site's potential eligibility for the National Register of Historic Places. Recommendations regarding the historic significance and proposed removal of man-made objects were subject to review and approval by the State Office of Historic Preservation.

In February 1978, the State Lands Commission awarded a contract for historic evaluation work in connection with the hazard removal project to Alan M. Peterson of Davis, California, in association with subcontractors Rand F. Herbert and Stephen R. Wee. Work commenced following final contract approval in April, 1978, with the first of six reports on specific sites and objects submitted in May, 1978, along with a summary overview of Delta history. Research and preparation of additional reports continued through October, 1978, when the last of the "site specific" reports was submitted to the State Lands Commission.

The primary goal of the research effort was, of course, the identification and evaluation of man-made objects designated by the State Lands Commission as subject to removal. The first step in that procedure was on-site inspection of the waterways and objects involved in company of a State Lands Commission Land Agent, and the photographing of those objects. Inspection cruises were carried out on boats chartered by the State Lands Commission or on Sheriff's Patrol boats from San Joaquin and Contra Costa counties.

Following the examination of the waterways and the preparation of maps showing site locations, the task of documentary research began. A wide variety of sources were used in an effort to identify each site and trace its history. The research was performed in various places including the libraries of the University of California, Berkeley, Davis and Los Angeles campuses, the University of the Pacific, the University of Southern California, the Bancroft Library and the Water Resources Center Archives, both in Berkeley, the Huntington Library in San Marino, the State Library and State Archives in Sacramento and public libraries in Stockton and Walnut Grove. Museum collections were utilized including those of the Pioneer Museum and Haggin Gallery in Stockton and the San Francisco Maritime Museum. Collections at the California Historical Society, the Society of California Pioneers, The San Joaquin County Historical Society and Museum and the Contra Costa County Historical Society were used as were the archives of the Pacific Mutual Life Insurance Company, whose former officers figured prominently in Delta reclamation. Government document collections were among our most valuable resources. County Assessor records and plat maps, minutes of the Board of Supervisors, road reports, and other local documents were useful, as were maps and documents maintained by the State Lands Commission. The U. S. Army Corps of Engineers, Sacramento District, was helpful in providing information on waterway structures licensed by the Corps and in supplying numerous old maps and plans. Records available at the United States Geologic Survey Office in Menlo Park and the Federal Record Center in San Bruno were researched. These and other documentary sources were at the heart of the research project but not all sites proved to be documented. The identification of undocumented sites was materially assisted by the recollections of long-time Delta residents like Leo Fallman (former island superintendent), Tony Busalacci (fish buyer and mailboat operator), Bud Christiansen (tugboat pilot), Wilton Colberg (boat builder), Wallace McCormack (President of the Bank of Rio Vista), and John J. McIntosh (former accountant for California Delta Farms and the last president of Productive Properties, Ltd.). Leonard Covello of Stockton made available his extensive archive of historic photographs. Whatever success this project has enjoyed owes a great deal to all the people who have assisted us and we would like to take this opportunity to express our deepest appreciation for their help. Following research, reports were written in which each site was described as it appears today, its history was outlined and an evaluation of its historical values and National Register potential was made.

Throughout the research effort our goal was not only to identify the specific sites but to understand the basic history of the islands adjacent to those sites in order that a satisfactory perspective would be maintained and each site's importance clearly understood. Thus each of the six reports dealing with specific sites and waterways included a section on the land ownership and reclamation history of the report area and sections on agriculture and transportation.

Research into the history of Delta reclamation on specific islands yielded some interesting results that extend beyond the strict definition of our task of historical identification and evaluation of designated sites. What has emerged is a fascinating tale of financial and corporate development that has not been emphasized by most historians even though it is of central importance to an understanding of Delta history. We have used the opportunity of this final report to summarize these general findings. In preparing the following historical narrative, we do not intend to duplicate all of the specific information in the six previous reports and the overview, but to develop themes in Delta development that have emerged in the course of our research. It is our hope that this summary narrative will be useful to those interested in the history of the Sacramento-San Joaquin Delta both in and out of government.

We have also prepared a brief summary of the historic resources of the study area and a list of the most interesting sites or objects encountered during the project. This material follows the historical narrative.

PATTERNS OF RECLAMATION AND DEVELOPMENT  
IN THE  
SACRAMENTO-SAN JOAQUIN DELTA

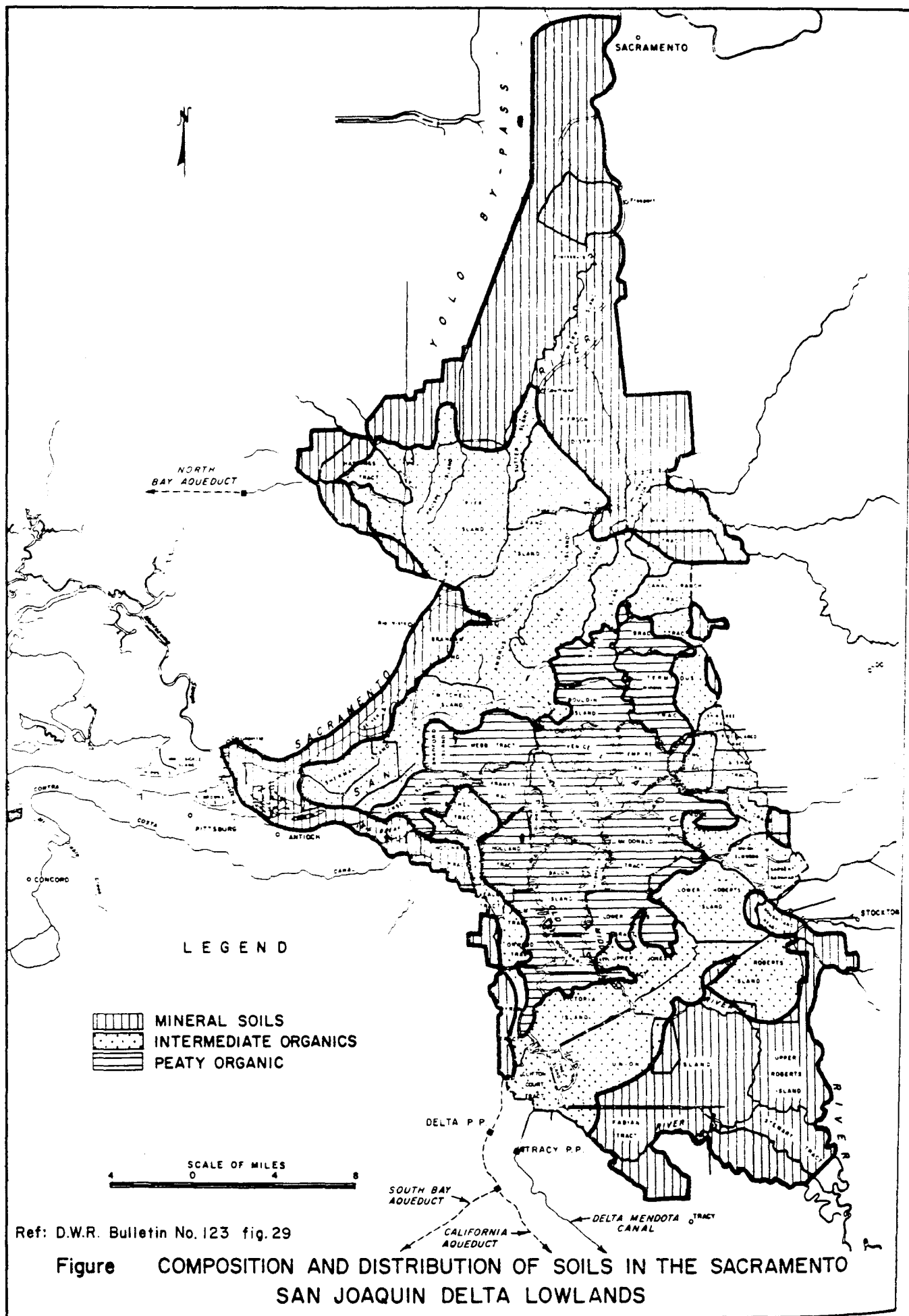
I. The Influence of the Environment

Several important physical features set the Sacramento-San Joaquin Delta apart from the rest of California's Central Valley Basin; the low elevation of the land, the influence of ocean tides on water levels, and the area's "unique soils" (SWRCB, Draft EIR, III-1). All of these distinctive features are related to one another. The low elevation (five feet or less above sea level in the lowland Delta) helps make the Delta an estuarine environment; a place where the rivers meet the tides. The lowlands in their natural state were subject to periodic flooding, sometimes at high tide and in other places when the rivers overflowed their low banks from winter and spring runoff. The frequent inundation of vast areas of the Delta, in turn, affected soil composition. Hydrophytic, or marsh, plants like tules and reeds died and decomposed over a period of at least 10,000 years to form an organic soil known as peat. As might be expected, the peat soil zone corresponded to the lowest regions of the Delta, giving way to intermediate organic soils (twenty percent or less organic material) on slightly higher lands. Mineral soils occupy the still higher margins of the Delta. The accompanying map showing soil distribution in the Delta reveals a region of intermediate organic soil penetrating southwestward to Sherman and Twitchell Islands, even though the area closer to the river junction might seem a logical place for peat soils. The Sacramento River, however, carried sufficient sediment to build low natural levees and modify the soil composition along its course.

The physical facts of elevation, soil composition and tidal influence in water levels are of fundamental historic importance. The reclamation pattern in large measure reflected the soil pattern, with areas of mineral and intermediate organic soils being successfully reclaimed before the central core of peat soils. The reasons involve the relatively higher elevations of many of these lands and the fact that mineral soils make far better levees than do peat soils. Among the easiest lands to reclaim were some of those in close proximity to the Sacramento River where physical factors of elevation and soil were combined with convenient river transportation. Throughout the Delta reclamation began by following the patterns of the land, and succeeded in creating a substantially different, man-made environment.

II. Reclamation: Organized and Unorganized, 1850-1868

Swamp and overflowed lands in California were granted by Congress to the new state in 1850 in legislation known as the Arkansas Act. The Act provided for the donation of those less



valuable lands with the stipulation that proceeds from their sale would be used to reclaim them. Although the State moved slowly to formalize procedures for the purchase of the swamp and overflowed lands, settlers began occupying the more accessible riverfront lands. Reuben Kercheval arrived at Grand Island in 1850 and by 1852 both Andrus and Tyler islands had settlers. (S.E.D. Notes, No. 94, 19; USBR, Report DL-5, 6). Low levees were begun by 1853 on Grand Island (S.E.D. Notes, No. 94, 19), and on Andrus Island by 1855 although these early attempts were generally unsuccessful. (USBR, Report DL-5, 6). At the southern end of the Delta, Union Island's first levees were erected by John Petty in 1857. (S.E.D. Notes, No. 92, 1). In 1855 the State Legislature enacted a law for the sale of swamp lands at \$1.00 an acre with a maximum of 320 acres per individual, though in 1859 the acreage limit was raised to 640 acres. Land sales increased following the enactment of the higher acreage limit and in the early 1860's considerable land passed into private ownership in tracts of approximately 640 acres.

With islands or tracts divided between small owners, levee construction, when it was attempted, was generally haphazard. Even a substantial landowner like John Petty of Union Island admitted, "There was no particular system to my work, I had to do it just as I could and when I felt able." (S.E.D. Notes, No. 92, 1). If allowed to continue such lack of coordination in reclamation might have guaranteed that virtually no permanent reclamation would take place. In 1861 the California legislature, responsible under the Arkansas Act for putting money from swamp and overflowed land sales into reclamation, decreed the formation of a Board of Swamp Land Commissioners to oversee the organization of local districts and the expenditure of swamp land funds to reclaim those districts. Procedures for setting up a district were outlined with the stipulation that the district had to be susceptible to a single mode or plan of reclamation. In practice, that meant that district boundaries had to reflect the physical realities of the environment so that reclamation was actually possible. Districts, therefore, generally included all of an island or portions that could reasonably be reclaimed separately. Engineers were appointed to plan reclamation work and soon improved levees were built and minor sloughs dammed.

In the study area, the greatest activity in this period was in the north. Landowners on Andrus and Tyler islands were quick to form swamp land districts. Swamp Land District No. 8 on Andrus Island closed several sloughs and erected some miles of levee, although the flood of 1862 did considerable damage to the works. Tyler Island residents organized District No. 4 and by 1870, saw their levees rise to a three-foot height on the northern end of the island where the basic elevation of the land was higher. (USBR, Report DL-5, 5). Staten Island's Swamp Land District No. 38, formed in 1864, enjoyed the distinction of being among the longest lasting of any of the early districts, continuing to the



present day to maintain the island's levees. Bouldin Island had a district, No. 22, organized in 1861, but little was apparently accomplished. On New Hope and Brack tracts east of the Mokelumne River, Swamp Land District No. 5 was organized and began an ambitious by-pass canal to route Mokelumne River floodwaters through Beaver Slough to the South Fork of the river below the district. Although the canal was reported nearly completed in 1865, nothing further was heard of the plan. (DWR, Bulletin No. 37, 116). In January, 1865, Swamp Land District No. 46 was formed in the area later known as Terminous Tract, and later in that year its entire reclamation system was under contract, including ten miles of levee, five dams to cut off small sloughs and fourteen tide and flood gates. (DWR, Bulletin No. 37, 118). The district was owned entirely by R. C. Sargent, the leading reclaimer on the Mokelumne River mainland tracts. (S.E.D. Notes, No. 90, n.p.). Lands in the report area to the south of the main channel of the San Joaquin River were little affected by the work of the Board of Swamp Land Commissioners, although steps may have been taken for district organization without any subsequent work.

Although the Board of Swamp Land Commissioners and the organization of swamp land districts seemed promising, and in fact essential if landowners were going to work together on effective reclamation, the system was short-lived. Reclamation was proving far more expensive than had been optimistically assumed and State funds were inadequate to complete effective levees. Landowners could, by mechanisms available through the Board of Swamp Land Commissioners, tax themselves for further improvements but that alternative could prove less palatable to some landowners than the collection of money from the State's swamp land fund derived from swamp land sales. For reasons not altogether clear, the State abolished the Board of Swamp Land Commissioners in 1866, transferring responsibility for district organization and payments from swamp land funds to the counties' Boards of Supervisors. County administration was generally lax and at times chaotic. Whereas the Board of Swamp Land Commissioners had required the districts formed under its jurisdiction to have boundaries corresponding to a reasonable plan for reclamation, the supervisors tended to approve any district proposed to them, whether or not it stood any chance of successful reclamation. In some instances districts were formed encompassing only a single property owner for the sole purpose of exempting the property from other districts to avoid payment of reclamation assessments, and district boundaries often overlapped.

Thus hundreds of districts were organized during the ensuing years without system, fixed policy or regard to the feasibility of the project . . . great numbers were organized to merely qualify before a complacent Board of Supervisors for the collection of a per acre allowance for completed reclamation from the swamp land fund. This qualification was often accomplished by the simple expedient of throwing a single furrow around the designated boundaries. (DWR, Bulletin No. 37, 118-119).

Although some Swamp Land Districts established by 1865 survived, the demise of effective reclamation district organization left a vacuum in Delta reclamation. Small landowners, if they could not organize functional districts, stood little chance of coordinating individual levee systems well enough to bring about complete reclamation. Also reclamation was a costly undertaking if the levees were to do any more than just keep out ordinary high tides. The failure of semi-public organizations left reclamation largely in private hands and the abolition of the 640-acre limit in 1868 opened the door to the entry of large financiers and speculators into reclamation. By the late 1860's, it had become plain to most observers that for reclamation to succeed, whole tracts would have to be reclaimed at once rather than piecemeal and that such a practice would require vast sums of money. What districts had been unable to accomplish in their short effective careers would now be attempted by entrepreneurs.

### III. Large-Scale Reclamation Begun: 1868-1895

George D. Roberts came to California from Ohio in 1850. He prospered in the Nevada City quartz mines and soon sought additional means of increasing his fortune. Like most west coast capitalists of the day, Roberts invested in the Comstock silver mines, and, perhaps in association with B. F. Mauldin, in Delta real estate. In 1868, he began buying swamp lands in the Delta, accumulating, at one time, a quarter of a million acres. (Report of Joint Special Committee to Investigate Chinese Immigration, 441). In 1869, he formed the Tide Land Reclamation Company with a capitalization of \$12 million and control of 120,000 acres in the Delta. (Articles of Incorporation, Tide Land Reclamation Company). The company included many of the leading financial investors of the time, including Judge Solomon Heydenfeldt, Lloyd Tevis and James B. Haggin. Their purpose was plain enough -- buy lands cheaply, reclaim them and sell them at a profit. Roberts paid from 50 cents to three dollars per acre plus a dollar to the State, but estimated reclamation on a large tract to cost six or seven dollars per acre and up to \$25 per acre on Grand Island. The reclaimed lands, however, were worth up to \$75 per acre, leaving a tidy profit for Roberts and his partners. (Report of Joint Special Committee to Investigate Chinese Immigration, 441). The Tide Land Reclamation Company reclaimed Twitchell and Grand islands and in 1871 leveed Brannan Island and adjacent Andrus Island, selling the Andrus Island land for \$25 per acre. (Sacramento Union, April 12, 1873). In 1870, the well publicized reclamation of Roberts Island was begun under the direction of Captain W. C. Walker but was not completed. On Union Island, work was not reported until 1876 when exterior levees were built. One section constructed with horse-drawn scrapers cost about \$7,100 per mile and had a height of nine feet. (S.E.D. Notes, No. 92, 2).

Tide Land Reclamation Company levees were built primarily by Chinese labor on a contract basis, using hand tools. Any machinery involved in the construction process was operated by white men.

In questioning before a Legislative Committee investigating the problems of Chinese immigration, Roberts expressed the opinion that the Chinese were good workers and that without their efforts reclamation could be virtually impossible in the Delta. (Report of Joint Special Committee to Investigate Chinese Immigration, 436-441). Roberts also attempted to use early dredgers but the machines were inadequate and their levees proved inferior to those built by the Chinese or with horse scrapers.

George D. Roberts' financial affairs and those of the Tide Land Reclamation Company were nothing if not complex. Further study of Roberts' operations in tule land development has raised more questions than have been answered. Roberts' investments in real estate and mining ventures in the West involved various associates of William C. Ralston, the financial kingpin of California in the 1870's, including Asbury Harpending. Harpending was a speculator of some prominence in an era of speculators and was in some now obscure manner associated with Roberts in his tide land investments. In 1871, Harpending was in London and may have been trying to sell Roberts Island and Union Island, both owned by the Tide Land Reclamation Company, to British investors. (George D. Roberts to Asbury Harpending, November 29, 1871, December 4, 1871, March 18, 1872). At the same time, Harpending and Roberts, along with Ralston and such luminaries as David D. Colton of the Southern Pacific, General George B. McClellan, S.L.M. Barlow and Baron Rothschild, were involved in a bizarre episode known as the Great Diamond Hoax. Roberts was perhaps the first to be taken in by the two swindlers who salted a diamond field in northwestern Colorado and induced some of the West's most solid capitalists to invest in it. The fraud was revealed in late 1872 with Roberts, Harpending, Ralston and others having lost substantial sums. (Harpending, 138-195). Roberts' letters reveal that the diamond hoax only aggravated his already shaky financial position. Harpending was so disgusted with finance after the affair that he temporarily retired and sold off his properties. In that connection, he says, "I sold a great acreage of tule land to George D. Roberts, part of which comprises what is known as Roberts Island, not far from the City of Stockton." (Harpending, 193). The sale may have been of an interest in those lands for Harpending apparently never owned them outright. His statement raises some interesting questions regarding the actual ownership and management of the Tide Land Reclamation Company that have not been addressed by previous scholars.

Roberts' letters to Harpending indicate that he often operated on the verge of bankruptcy. In a letter written in the summer of 1872, during the diamond excitement, he says, "I owe Lent-Latham-Fry and Ralston, in the aggregate near 200,000 - which is the bulk of my indebtedness. I have settled with Haggin and Ruse. They pressed me. I made fearful sacrifices, but finally settled everything up satisfactorily." (George D. Roberts to Asbury

Harpending, July 4, 1872). Roberts needed to locate a purchaser for his tidelands if he was to remain solvent, so in the mid-1870's he began a complicated series of dealings with Thomas Hansford Williams, an attorney who had made a fortune on the Comstock Lode. In 1876, the Tide Land Reclamation Company began selling off major properties, including Union and Roberts islands. Williams and his partner, David Bixler, purchased Union Island, and the Stockton Independent of June 6, 1876, reported that Williams had "bought all the right, title and interest of George D. Roberts in the swamp and overflowed lands in this (San Joaquin) and adjacent counties and proposes entering into the reclamation of the lands on an extensive scale." Just what property changed hands is unclear, but the appearance of Williams' and Bixler's names on plat maps in 1877 on lands belonging previously to the reclamation company indicates that most, if not all, of Roberts' and the Tide Land Reclamation Company's holdings were in new ownership. Whether or not it had any land, the Tide Land Reclamation Company still existed on paper and in 1879 Roberts deeded the stock in that concern to Williams and Bixler in settlement of a debt of over \$600,000. (Irwin, 13).

The legal tangle of stocks and lands should not be allowed to obscure the fundamental point of the Tide Land Reclamation Company's brief career. It brought large-scale capital and organization to the business of reclamation. Its levees usually had to be rebuilt at a later date but it did initiate the reclamation of several large tracts and in a sense proved the possibility of doing so. The Tide Land Reclamation Company was a gamble, a speculation. Roberts was asked by a Legislative Committee about the risks.

"You encounter great risks in reclaiming these lands. do you not, from floods?"

"Yes sir; it was an experiment when we started in. Very few capitalists would touch it at all. It is still looked on now as very hazardous."

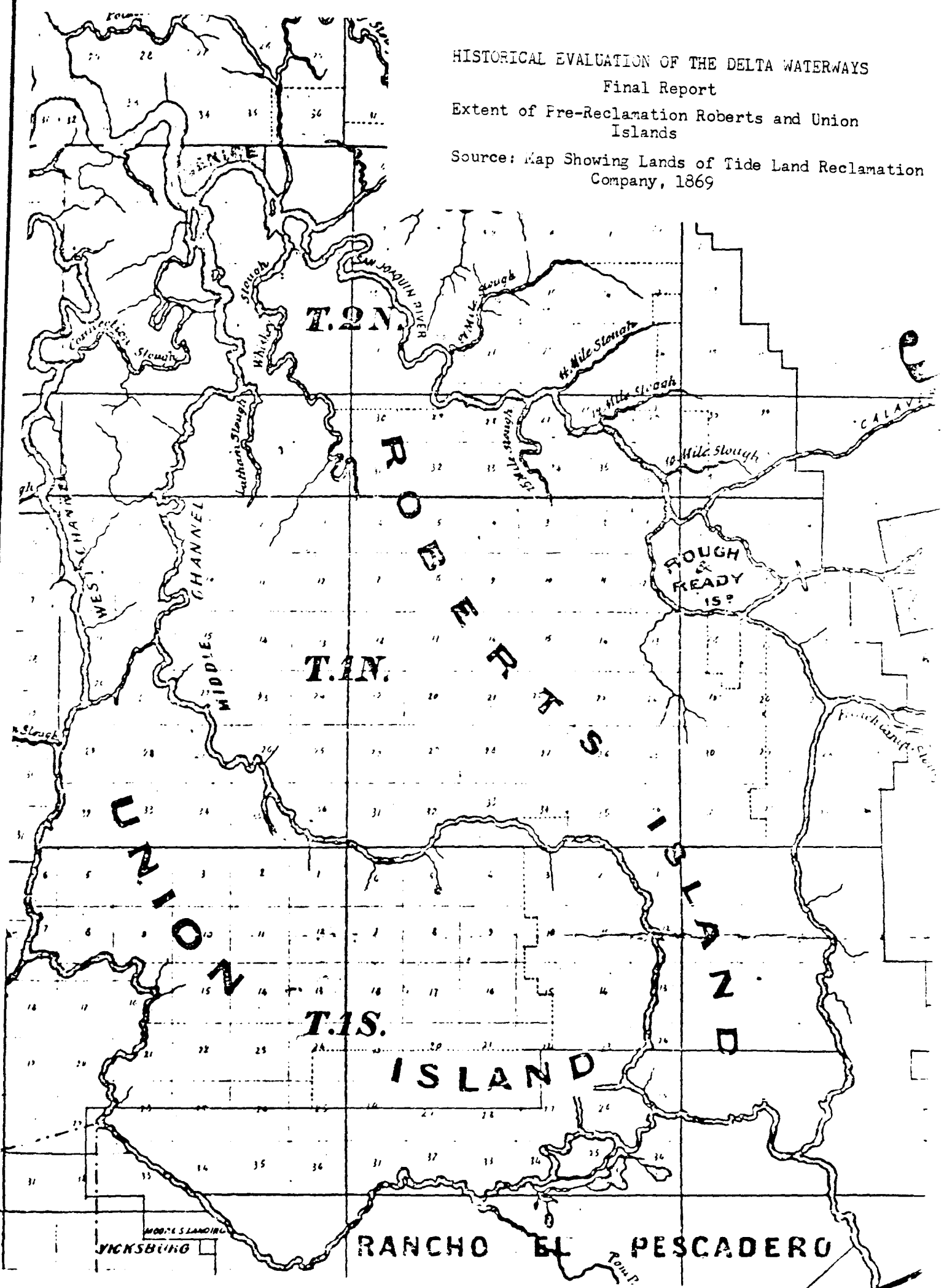
(Report of Joint Special Committee to Investigate Chinese Immigration, 441).

Hazardous as swamp land reclamation may have been as an investment, Roberts' example drew other capitalists into the risks of reclamation. T. H. Williams entered the Delta in connection with George D. Roberts and became one of the area's major landowners. Williams came to California in 1850 and immediately tried his hand at gold mining. That occupation proved unprofitable and did a brief fling at ranching. Trained as a lawyer, Williams soon began practicing that profession and prospered. In 1859, he was elected to a two-year term as California's Attorney General. He left California for Virginia City, Nevada, in 1863 to try his luck as a lawyer on the Comstock Lode. In partnership with David Bixler, Williams engaged in a

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Extent of Pre-Reclamation Roberts and Union  
Islands

Source: Map Showing Lands of Tide Land Reclamation  
Company, 1869



series of complicated lawsuits common in the mining regions. One result was the acquisition by Williams and Bixler of the Central No. 2 Mining Claim in 1871, in payment for legal services. The mine was generally considered worthless, but it turned out to be astride the lode known as the Big Bonanza of the 1870's. Williams and Bixler made several million dollars on the mine and Williams even tried to be elected U. S. Senator from Nevada. After his defeat for that office by William Sharon, he and Bixler left Nevada and returned to California. ("Biography of T. H. Williams." n.p.; Irwin, 9-10).

While Bixler departed for a two-year honeymoon in Europe, Williams began investing their fortune in Delta land. Although Williams and Bixler acquired numerous properties throughout the Delta in their dealings with George D. Roberts, their main interest was in the reclamation of Union Island, then including what is now known as Vistoria Island. They bought not only the Tide Land Reclamation Company's holdings on the island, but also the 4,400 acres belonging to Captain George Kidd, a retired riverboat entrepreneur. (Irwin, 12-13). Williams and Bixler began levee construction on the 28,000-acre island in 1878, taking over from the Tide Land Reclamation Company. The partners' levees were substantial but the south end of their property adjoined the old Mexican land grant known as El Pescadero, then owned by Henry M. Naglee, whose levees were less secure. In February, 1878, floodwaters topped Naglee's levees and flooded part of Williams' and Bixler's portion of the island. To prevent a recurrence of that disaster, Williams began a new levee following the Pescadero grant line from Middle River on the east to a point known as Elk Ridge and then north to again intersect Middle River. The levee was built by horse scrapers to an eight foot height except on one mile that proved too boggy for the horses. At that point, Chinese labor was used to complete the levee. (S.E.D. Notes, No. 92, 5).

Williams described his levee construction methods to E. E. Tucker in late 1878 or 1879. Tucker's notes reveal the following information about the grant line levee and other Union Island levees built by Williams and Bixler.

"The past year we constructed another scraper levee on the line of what is called the Pescadero Rancho, of an average height near eight feet, four feet wide on top with slopes of four to one on the outside and three to one on the inside."

"I regard that as the best shape of any scraper levee made by us, and would recommend in all cases of scraper levee to give the levee bulk and solidity by means of heavy slopes rather than width on top."

"By that means, the body of the material is placed where it has to resist pressure most. The greater the slope, the better the levee."

"On peat lands we have constructed our levees by building two training walls of peat, and then pumping in the sand between them until the space is filled."

"It makes a better levee than any I have ever seen in this or any other country."

"The peat stands wash better than any other material which can be exposed to the water and the sand gives weight and solidity to the structure, besides filling all the holes, crevices and spaces of the peat walls."

"Our training walls are about three feet wide on top and fifteen at the base, while the sand filling is reversed, being about fifteen feet on top and eight feet at the base."

"These levees were intended to be about eight feet high; but they have settled greatly and will have to be added to."

"One advantage of such a levee is that it exposes all the weak places in the land upon which it is placed and continues to sink and settle until it secures a firm foundation."

"It is an expensive levee on the plan adopted by us, having cost us sixteen thousand dollars per mile, while the scraper levees above-mentioned of greater dimensions have cost only from six to eight thousand dollars per mile."  
(S.E.D. Notes, No. 92,3).

Williams' comments as recorded by Tucker do not explain how the sand was pumped in between the peat retaining walls. A biography of Williams' life based on a dictation made shortly before his death in 1886 by associates of historian H. H. Bancroft throws further light on his levee construction methods. Peat soil used by itself made inferior levees, so Williams cast about for a way to bring mineral soils to his levees. The answer was a dredge that scooped up sediment with an endless chain of buckets and elevated it to a height of 45 feet where it went into a hopper and thence through a 150-foot long inclined pipe to the levee. ("Biography of T. H. Williams," n.p.). The dredges used by Williams may have been designed in association with George D. Roberts. (Irwin, 15). Whether constructed by dredger, horse scraper or Chinese labor, Williams and Bixler's Union Island levees were impressive accomplishments for their day. The island was enclosed by such levees by the early 1880's although parts of the domain apparently remained unfit for cultivation for some time.

Another major Delta landowner and reclainer of the 1870's was Serranus Clinton Hastings. Born in New York, Hastings moved to Indiana and then to the Iowa Territory where he became a leading lawyer, territorial delegate to Congress and Chief Justice

of the Iowa Supreme Court when statehood was granted. The California Gold Rush induced Hastings to leave Iowa in early 1850, but he did not head for the mines. Instead he was elected the first Chief Justice of the California Supreme Court. In 1852, he became Attorney General and served a two-year term, after which he returned to a lucrative private practice. Hastings specialized in the handling of cases involving Mexican land grants where the protracted litigation often left the Mexican grantees impoverished and their ranches in the hands of their attorneys. Hastings owned land in various places throughout California and at one time bought half the town of Benicia on the unsuccessful speculation that the State Capitol would be located there. He also invested heavily in Delta real estate and reclamation, perhaps because of an association with James B. Haggin and Lloyd Tevis that lasted 16 years. (Johnson, 9-22; San Francisco Call, September 8, 1890). Haggin and Tevis had been associated with George D. Roberts in the Tide Land Reclamation Company, Haggin serving for a time as the Company's president.

Like Roberts and most other reclaimers, Hastings used Chinese labor to build his levees, but unlike Roberts he disliked them while at the same time admitting the necessity of having a pool of cheap, hardworking labor.

"I think the Chinaman has been, so far as developing some of the resources of California is concerned, indispensibly necessary, as in the reclamation of our submerged lands. I have spent more than fifty thousand dollars in the reclamation of these submerged lands. I have done it with Chinamen."

(Report of Joint Special Committee to Investigate Chinese Immigration, 588).

Their value as citizens, however, he questioned, referring to the "peons, I please to call them" as "a fungus, a foreign substance, an unhealthy substance." (Report of Joint Special Committee to Investigate Chinese Immigration, 590).

Already mentioned as an associate of Roberts and Hastings, James Ben Ali Haggin was another important capitalist involved in Delta reclamation. Haggin came to California from Kentucky in the Gold Rush and established a legal practice that gave him sufficient capital to invest in mining stocks. His associates in these ventures included his partner Lloyd Tevis and George Hearst. Together they developed the Anaconda Copper Mine in Butte, Montana and the Homestake Gold Mine in the Black Hills, two of the greatest mining properties in the American West. (Paul, 147, 180, 185). His investments made him a wealthy man with all the badges of that status including a private railway car, a steam yacht and a Derby-winning race horse. (Burnley, 265-270). The Tide Land Reclamation Company, of which Haggin was once president, had held about two-thirds of Staten Island between the forks of the



Mokelumne River. Five foot high levees were erected in 1873 only to be damaged severely in 1875. The island's northern portion was higher in elevation and had been settled by small owners by 1864 when a low levee was built at that end. (USBR, Report DL-5, 9). By about 1877, Haggin had succeeded to the Tide Land Reclamation Company's Staten Island lands as well as the property at the northern end so that he owned all of Staten Island except for a parcel at the southwestern corner. E. E. Tucker's field notes from 1879 tell a more complex story of land ownership than revealed by other documents, so the precise stages of Haggin's acquisition of the island are in some doubt. (S.E.D. Notes, No. 89, 5). At any rate, Haggin's acquisition of the island was followed by its transfer from Sacramento County's jurisdiction to San Joaquin County, settling a boundary dispute that had not seemed so pressing until development proceeded to the point that Haggin and any other owners on the island by 1878 yearned for the lower taxes of San Joaquin County. (Thompson and West, 133). Haggin leased land to tenant farmers, as did all of the large-scale reclaimers, and by 1879 a short-lived little town known as Hagginsville was established on the North Fork of the Mokelumne River with 200 citizens. (Thompson and West, 133; Thompson, 421-422; San Francisco Bulletin, Nov. 28, 1879). Haggin finally sold Staten Island to the Staten Island Land Company about 1900.

Henry Douglas Bacon, who had interests in banking, mining and agricultural development in southern California, was another important investor in Delta reclamation who, like T. H. Williams, became closely involved with construction activities on his lands. Unlike Williams, however, Bacon's earnest efforts did not succeed in permanently reclaiming his island holdings. It has been generally reported that Bacon Island, lying north of historic Union Island between Old River and Middle River, was leveed in 1872 but abandoned due to floods in 1874 and left unreclaimed until the Twentieth Century. (USBR, Report DL-8, 5-6). Examination of manuscript records reveals a much different history that deserves closer examination.

An 1870 map of San Joaquin County showed S. C. Hastings in control of Bacon Island but E. E. Tucker, on the authority of H. D. Bacon, reported that Bacon, Sherman Day and S. C. Hastings bought a 9,000-acre tract in 1872 from the Tide Land Reclamation Company. (S.E.D. Notes, No. 89, 10). The precise boundaries of the sale are unclear but may have included much of present-day Mandeville Island as well as modern Bacon Island. Sherman Day was placed in charge of levee construction and quickly completed a six-foot high levee around the island. The levee was set back about 100 feet from the riverbank as a compromise between Day's desire for a larger set-back to allow a flood channel and Bacon's wish to levee right to the water's edge to get more land within

the levee. The completion of the levee in the fall of 1872 allowed Bacon to burn and seed his land in the winter of 1872-1873. However, a flood in June, 1873, destroyed the levee and the crop. (S.E.D. Notes, No. 89, 10-11).

Peat was a notoriously unstable levee material. Col. William Birdie Hyde noted that under changing water pressure from the tides the peat soils would "palpitate as does a woman's breast under certain influences." (Irwin, 17). To locate a better foundation for future levees, Bacon used a sounding rod to measure the depth to hardpan. He discovered that the best underlying soil conditions could be found closest to the rivers.

"...therefore, I decided to abandon the old levee and build a new one on the hardest and highest land near the river. I then moved my levee out to the river bank, and being led from my examinations to consider that nothing was solid, I conceived the idea of driving piles to hardpan on both sides of the levee, thus forming a box, intending to pile peat into it; but I was mistaken, the peat was too soft and light. After driving 10,000 piles, I gave it up." (S.E.D. Notes, No. 89, 11-12).

A section of the 1873 levee on Old River was built with a machine known as a Sullivan ditcher that excavated a ditch 12-14 feet wide and 4-5 feet deep, piling the material to one side to form a levee. (See S.E.D. Notes, No. 89, 4 for further description). The levee so constructed proved disappointing with parts of it sinking to the old ground level even before the ditcher's contract had been completed. The instability of the new levee was one of the reasons for driving the piles, which were probably placed in late 1873 or early 1874. (S.E.D. Notes, 89, 11-12).

At the same time, a cross levee was cut to separate Day's holdings from those of Bacon. The renewed efforts at reclamation apparently led Bacon to erect a house on Bacon Island in 1873 and Bacon visited the island regularly. (F.S. Page to H. D. Bacon, August 6, 1873). Also in 1873, a financial panic swept the United States making credit tight. Bacon wrote to lawyer S.L.M. Barlow of New York, "I have been doing so much in tule reclamation that I am drained and shall need all the funds I can secure until I make a successful crop." (H.D. Bacon to S.L.M. Barlow, October 24, 1873).

Bacon continued his efforts to build secure levees. He was plagued by levee cracks, seepage, and sinking on his new levees. Two solutions were evolved. One was the use of brush mattresses to tie the levees together, the other was the use of mud from the riverbed in levee construction. Marvin Roberts invented a machine to dredge mud from the river and deposit it on scows. A conveyor then transferred the mud from the scows to the bank. To hold the mud in place until it dried, Bacon drove posts with boards as

crude forms. The weight of the mud caused the new levees to sink with additional mud piled on until the levee stopped sinking. (S.E.D. Notes, No. 89, 13). E. E. Tucker described the situation about 1879 as follows:

Mr. Bacon has lately built seven scows and launched them in the ditches by the side of the cross levees; it is his intention to take mud from the riverbed and, with his "conveyor", deposit it on these scows and move it to different points in his cross levees, loading first one place, then another, until he has settled the whole levee to hardpan; brush will be used to prevent the levee from breaking as it settles. (S.E.D. Notes, No. 89, 14).

While much of the work was going on, Bacon was receiving no income from his lands. In 1876, he noted that he did not yet have enough confidence in the levees to place farmers on the land. (H.D. Bacon to S.L.M. Barlow, April 29, 1876). By the Spring of 1877, he was encouraged by the dry winter to rent portions of the island to men who were putting in a barley crop. (H.D. Bacon to S.L.M. Barlow, June 27, 1877). The heavy rains of early 1878 worried Bacon and he wrote in April that "I am spending larger sums monthly upon my reclamation, which I cannot stop." (H.D. Bacon to S.L.M. Barlow, April 28, 1878.) Bacon's letters contain frequent references to visits to the island and the financial burdens that reclamation was imposing. In January, 1879, he said that "I am spending so much money that when I get a dollar it does not stick to me a moment." (H.D. Bacon to S.L.M. Barlow, January 11, 1879). Later that year he asked Barlow to sell some of his property in May rather than to wait for a better market in October because "my reclamation expenses are large and will continue for sometime yet and some of my old mining engagements are a drain upon me." (H.D. Bacon to S.L.M. Barlow, April 3, 1879). Setbacks continued, with the Stockton Herald of July 23, 1879, reporting that "The levee on Bacon Island on Middle River in the vicinity of the McLaughlin House for a distance of 300 feet in length sank yesterday and went completely out of sight." By 1879, Tucker reported that Bacon had spent \$50 per acre for all the land reclaimed. (S.E.D. Notes, No. 89, 14). The land was not truly reclaimed, making Bacon Island unsuitable for agriculture until it was finally leveed successfully in 1913 by California Delta Farms. Nothing illustrates H. D. Bacon's failure better than the 1905 tax assessment of the Bacon Land and Loan Company's San Joaquin County holdings at only \$10 per acre. (Bacon Land and Loan collection). H. D. Bacon fought tenaciously and at great cost to reclaim his Delta lands, but he was clearly bested by the unstable peat soils.

Bouldin Island was the scene of a reasonably successful early reclamation effort by San Francisco capitalists engaged in the

distillery business. As early as 1861, the island had been organized as Swamp Land District No. 22, but little was done under the district's auspices and the same held true for the years between 1864 and 1871, when the Sargent brothers and Smith held the island. (Thompson and West, 133). In 1871, Stevens, Baker and Company of San Francisco bought the island for \$12,000 and proceeded to construct a levee.

The popular belief at that time, was that all that was necessary to reclaim an island was to dig a ditch, build a small levee, and drain off the surface and seepage water by means of flood gates. Very little attention was paid to the location of the levee, it being left mostly to the Chinamen(.) As a natural consequence, it was very crooked and averaged only from 30 to 40 feet from the river. It was not considered advisable to cut the land between the levee and the river.

(S.E.D. Notes, No. 89, 1).

Stevens, Baker and Company made no major repairs to their small levee even though cracks developed and flooding year after year destroyed the island's crops. The owners finally abandoned the tract in 1874 "after having spent \$65,000 without ever realizing a dollar from crops." (S.E.D. No. 89, 2).

Bouldin Island was rescued from a permanent return to the tules by the Pacific Distillery Company of San Francisco owned by Henry Voorman, George Oulton and F. and J. Schultz who bought it in 1877, with legal title passing to the members of the company individually by 1883. (San Joaquin County, map, 1883). They paid \$64,000 for the island, indicating that Stevens, Baker and Company did not even make back the cost of reclamation. By 1879, Pacific Distilleries had spent a total of \$250,000 on Bouldin Island, and had succeeded in reclaiming it. (S.E.D. Notes, No. 89, 3). Reclamation was accomplished with a dredger that took mud from the river bed to make the levee. At first Bouldin Island was farmed directly by the Pacific Distillery Company, but later they adopted the general practice of leasing the land, along with horses, houses and seed to tenants in exchange for a share of the crop. ("Biographical Sketch of Henry Voorman," 8-9). It has been said that the company's object in purchasing the island was to grow grain and potatoes for conversion into alcohol (Rogers, July 9, 1951), but by 1886 the island was the principal source of potatoes for the San Francisco market. ("Biographical Sketch of Henry Voorman," 8).

R. C. Sargent and his brothers had failed to reclaim Bouldin Island as they would later fail to reclaim Empire Tract and King Island, but in the area north of White Slough along the South Fork of the Mokelumne River, they were a major force in reclamation. R. C. Sargent came west in 1849 and after a year as a Placerville storekeeper he moved to San Joaquin County. (Thompson and West, 121). He bought extensive swamp land tracts on the

margin of the Mokelumne River mainland but centered his reclamation efforts around Sargents Slough. Swamp Land District No. 46 in 1865 encompassed over 7,000 acres, all owned by Sargent and reclaimed by him with substantial levees and dams across Sargents Slough and other small watercourses. He grew grain on the firmer, reclaimed lands and ran cattle on the unreclaimed areas, the land that would later become Empire Tract and King Island being known for years as Sargent's Cattle Ranch. When he died in 1903, he was San Joaquin County's largest landowner.

Other capitalists tried their hands at Delta reclamation or speculation with limited success in the Nineteenth Century. John Coffee Hays and Sherman Day both held land in the Mandeville Island-Bacon Island area of San Joaquin County and both also served as U. S. Surveyor General for California, suggesting a possible link between that public office and the purchase of public lands for speculative purposes. Both Bacon Island and Mandeville Island were first reclaimed in the early 1870's, but the levees proved unstable and neither island was successfully farmed until the Twentieth Century. John C. Caperton, a land investor who with John C. Hayes held much of the site of Oakland, also had property on Mandeville Island. The list of minor capitalists engaged in Delta land transactions could easily be extended even further for the ownership maps of the Delta for the last several decades of the Nineteenth Century are a directory of sorts to the State's leading businessmen.

Not only Californians speculated in swampland reclamation. One of the largest companies was formed by Scottish investors from Glasgow in 1877, who hoped to turn a profit on the reclamation of Roberts Island. That island had seen an incomplete attempt at reclamation by the Tide Land Reclamation Company, and smaller owners were also building levees in the 1870's. J. P. Whitney bought the Tide Land Reclamation Company's holdings on Roberts Island in 1875, concentrating his reclamation efforts on the Upper and Middle divisions at the southern, higher end of the island. (S.E.D. Notes, No. 90, 15). By late 1876, the Middle Division had been leveed and Whitney sold out to Morton Coates Fisher. Fisher soon interested the Scottish investors and the Glasgow-Californian Land Company was formed to pump more capital into the island's reclamation. (Thompson, 487-488). Fisher managed to sell 30,000 acres that he had purchased to the Scottish firm which then contracted with him to build levees, dams and sluiceways. Work began with renewed vigor and by the end of 1877, some 40,000 pounds sterling had gone into 32 miles of levees, dams and gates largely on the so-called Lower Division at the northern end of present-day Roberts Island. (Glasgow-Californian papers; USBR, Report DL-9, 7). The cost of reclaiming about 36,000 acres in the Lower Division was approximately \$10 per acre, with one dam at a slough costing \$25,000. Where

possible, the work was accomplished with horse-drawn scrapers (Thompson and West, 43), but thousands of Chinese were found necessary to complete the levees. (Jackson, 213; Stockton Independent, September 21, 1877). Levee maintenance, however, proved a continuing headache and although the land was farmed by tenants, the Glasgow-Californian Land Company failed to make a profit on their investment. In fact, in 1886, the shareholders voted to begin winding up an enterprise that had lost at least one million dollars. (Jackson, 216).

The details of the individual reclaimers can be woven together to reveal a pervasive pattern to Delta reclamation after 1868. The State's decision to abolish the Board of Swamp Land Commissioners and thus weaken the district organization process was followed by the opening of the swamp and overflowed lands to acquisition unfettered by any acreage restriction. The impact of the latter action was immediately apparent as George D. Roberts began buying up huge sections of the tule lands. Roberts and his associates and those who came after them did, of course, have the financial resources to undertake some of the larger-scale reclamation projects. Yet they were not always popular. William Holttum, a Grand Island farmer, voiced his unhappiness with the large landholders in a letter written in 1879. His comments deserve quotation at length.

"Under the present system, the swamp lands are divided into swamp land districts, and the riverbanks are owned by settlers who occupy the lands in person, having large orchards and vineyards and the interior of the districts are low and swampy, having water on them nine or ten months in the year.

The banks lands are mostly segregated from the swamp lands and their titles are U. S. patents, and these speculators have secured title to a majority of acres in each district and secured the passage of a law giving the control of a district to a majority of acres; they then organize the district and elect themselves trustees, and this trusteeship gives them the power to let all contracts and purchase material for reclamation.

They then let contracts to their friends and employ engineers in their interest and if the engineers refuse to work in their interest, they are immediately discharged. These speculators generally take the contracts themselves and having power to audit their own accounts and draw warrents against the district in their own favor, they levy unreasonable assessments against the lands and pay their warrents and then sue the settlers if they refuse to pay theirs.....

.....General Thomas H. Williams owns on Grand Island 11,500 acres of land, pays scarcely any taxes, has no improvements or personal property, yet he has power under the law to control not only his own land, but all the lands in the district and levy taxes at will.

The lands of Williams' are all under water, and the settlers

lands on the riverbank are in cultivation and get no benefits from reclamation, yet they are taxed equal and Williams grinds out warrants by the thousands of dollars for his contracts, as he calls them; he has a mud pump which he is renting to himself at an enormous price, which is simply pumping mud on his low lands; and the settlers land will be expected to pay for it." (S.E.D. Notes, No. 94, 17-18).

Holtum identified the principal culprits; a list that parallels many of the names already discussed in this section.

"These San Francisco land owners are mostly stock brokers and manage the Swamp Land Districts in the same manner as they do a mine, by freezing everybody else out. Thomas H. Williams, G. D. Roberts, D. Zeile, Genl. H. M. Naglee, Parks of Calusa (sic) County, J. B. Haggin and Lloyd Tevis, R. C. Sargent, Bonnicastle, Sol. Heydenfeldt, and J. M. Pearson and men of that ilk are the men who have control of these lands, also Dr. Ryer who holds immense tracts of tule land and keeps them from being successfully reclaimed." (S.E.D. Notes, No. 94, 18).

Of course, Holtum had an axe to grind, and the Grand Island case did not have universal application for the existence of extensive bank lands was confined to a limited number of localities, primarily along the Sacramento River. His assessment of the character of the great landowners was not altogether inaccurate. They were forty-niners at heart, the kind of men novelist Frank Norris described in his portrait of San Joaquin Valley wheat grower, Magnus Derrick.

At the very bottom, when all was said and done, Magnus remained the Forty-niner . . . For all his public spirit, for all his championship of justice and truth, his respect for the law, Magnus remained the gambler, willing to play for colossal stakes, to hazard a fortune on the chance of winning a million. It was the true California spirit that found expression through him . . . It was in this frame of mind that Magnus and the multitude of other ranchers of whom he was a type, farmed their ranches. They had no love of the land. They were not attached to the soil. (Norris, 198).

Roberts and Williams, Haggin and Hastings and the other investor-speculators in Delta reclamation were indeed gamblers and they often lost. The Glasgow-Californian Land Company lost a million dollars or more. Stevens, Baker and Company lost at least \$13,000 by even the simplest calculation. Bacon, Hays, Day, Caperton and many others were left with nothing but abandoned islands to show for their investments. Henry Voorman, who entered the Delta through Pacific Distilleries and later owned land on Tyler Island as well as Bouldin Island, considered his reclamation investments to have a poor return. He told one of H. H. Bancroft's interviewers that he believed many others, including Haggin and Roberts had had little success in their financial

dealings in the tide lands. ("Biographical Sketch of Henry Voorman," 8). In all likelihood, costly swamp land reclamation was not a highly profitable proposition. Very few of the reclaimers, however, depended on Delta lands exclusively and some, like Haggin and Williams, brought substantial fortunes to the Delta. Even those like Bacon who spent heavily and took personal interest in the work had a great many other interests and prominent financial connections. The capitalists in other words, were not Delta men with other businesses, but rather important men who invested some portion of their time and money in the Delta.

Regardless of the monetary outcome of the reclamation process, the large-scale reclaimers did have their accomplishments. The entrepreneurs should be given credit for trial and error research into levee-making machinery such as dredges, into construction techniques and operational patterns. Union and Roberts islands, both huge tracts, were reclaimed as was the Pescadero grant in the southern Delta. Bouldin Island, Andrus Island, Tyler Island, Staten Island and the Mokelumne River mainland tracts were reclaimed by the turn-of-the-century. The lands reclaimed in the Nineteenth Century were by-and-large lands on intermediate organic or mineral soils; the successful reclamation of tracts wholly in the peat zone was rare with Bouldin Island being the prominent exception. Thus despite decades of activity, the first years of the Twentieth Century saw thousands of acres of the central Delta from Empire Tract to Upper Jones Tract to the Contra Costa County mainland still not permanently reclaimed. The story of the Delta from 1868 to 1890's was in large measure one of the impact of Gold Rust businessmen; by 1900 a new generation of investors was ready to enter the scene.

R. P. EASLEY, President

"Mans the Earth"

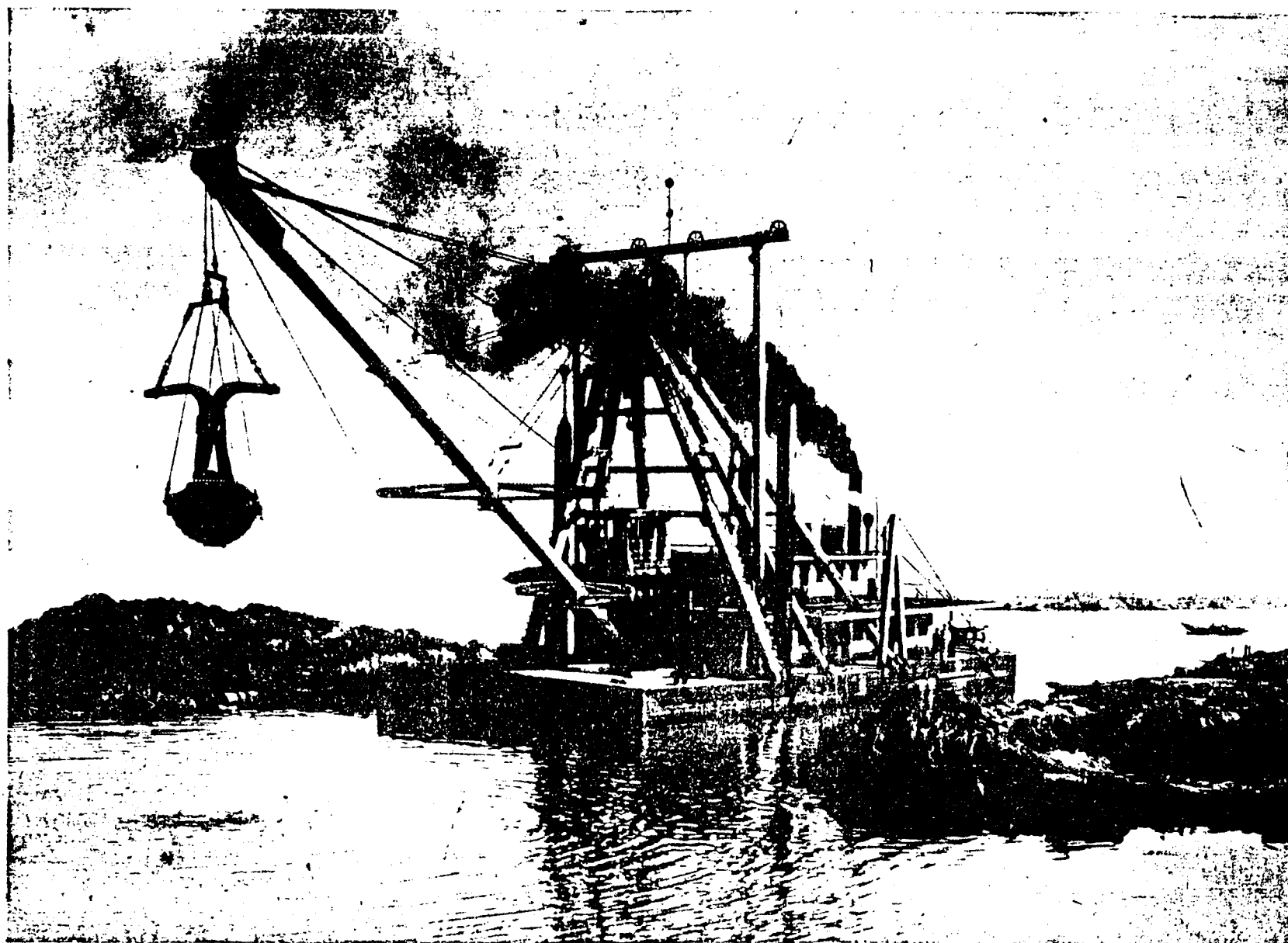
REEDING EQUIPMENT  
DITCHING MACHINES



DREDGING EQUIPMENT  
DITCHING MACHINES  
POWER SHOVELS  
DRAG LINES

## *"Moves the Earth"*

R. P. EASLEY, *President*  
L. W. MEHAFFEY, *Secretary*

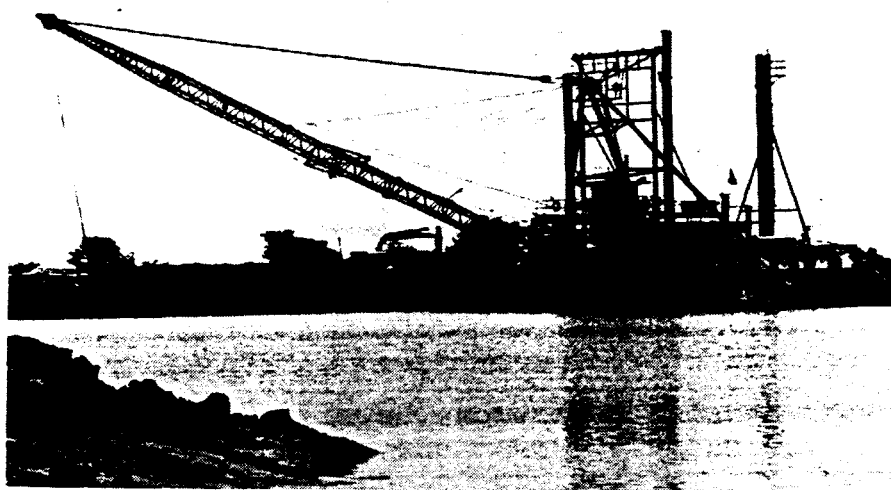
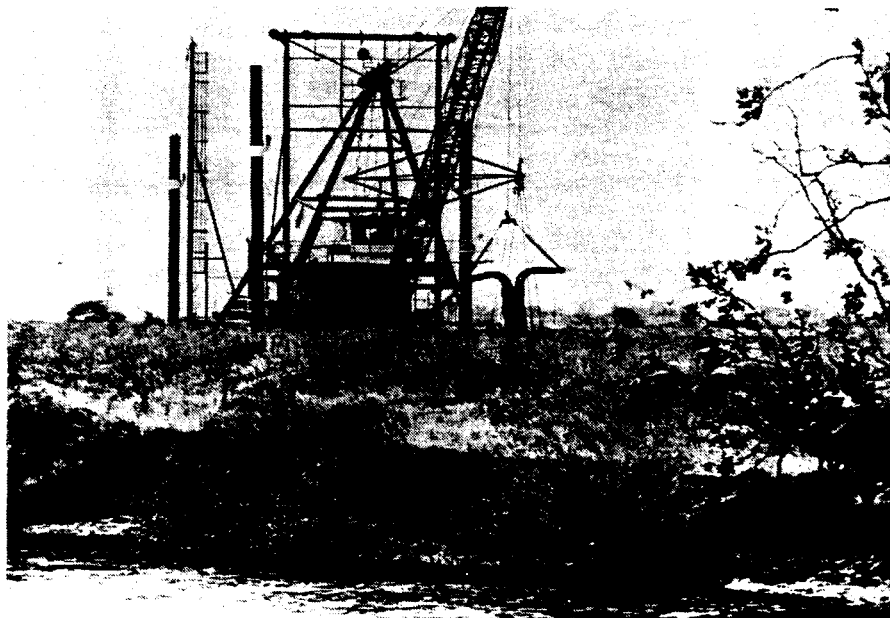


ANTIOCH, CALIF.  
PHONE 78

THE NEW "ROBERTS ISLAND DREDGE," TURNTABLE TYPE  
BOOM LENGTH, 165 FEET; BUCKET, 3 CU. YDS.

"MOVES THE EARTH"

(Byron Times Sixteenth Development Edition, 1936-37, p. 32)



Dredger Sacramento at work in Georgiana Slough, 1978

#### IV. Modern Reclamation, 1900-1920

##### The Lowland Delta

Final reclamation of the islands of the lower San Joaquin River occurred many years after that of the islands along the edges of the Delta. This was caused largely by the difficulty of building adequate levees on the unstable peat soils common to the interior Delta. (McIntosh interview, SWRCB Draft EIR, p. 111-124). These deeper peat lands, in their natural state, resembled "a stack of moderately rotted hay, incapable of supporting the weight of a horse." (Stockton Record, October 14, 1922). In addition, the low elevation of these islands meant that they were subject to regular inundation by high tides that rose a few feet above the surface. Not only were levees necessary to exclude waters raised by the tides each day, but also to shut out winter flood waters. Possessing little knowledge of previous flood levels or of scientific flood control of rivers, early owners of the peat lands assumed that a levee of four or five feet above high tide would adequately bar flood waters. Little consideration was given to the fact that flood water levels would increase as a result of confining the water in the channels formed by these levees. Failure of levees was common, but landowners continued to build them higher and higher to keep pace with the increasing flood height. (Stockton Record, October 10, 1922). Although never entirely alleviated, the flood problem reached a peak in the early Twentieth Century, declining dramatically thereafter as a result of the Sacramento River Flood Control Project adopted by the State in 1911 and the Federal Government in 1917, and by the construction of upstream reservoirs.

The means of constructing levees on peat lands that were sufficiently solid enough to stay in place were not immediately available. It had been discovered that effective levees could not be built of peat, but rather should be constructed of heavier soils, such as the sediment from river bottoms. The first attempts at dredger design intended to mine that mud and place it on levees had been flawed, sometimes because they cut a trench or borrow pit too close to the levee. The answer to this problem came in 1879 with the invention of the clamshell dredge, which became the standard tool of Delta reclamation because it could efficiently scoop mud from channel bottoms and deposit it accurately a safe distance from the borrow areas. Once built, the instability of the peat levees required a near-constant effort to maintain and strengthen them. Dredgers were often sent around islands repeatedly, adding more material to the levees to compensate for the compaction of the peat foundation. (Fallman interview; McIntosh interview).

As in the Nineteenth Century, Twentieth Century reclamation required substantial resources of financial capital, the consolidated ownership of large tracts of land, and considerable engineering expertise. Levees around the peat islands of the central Delta had crowns averaging twenty feet in height and with

# TWENTIETH CENTURY PEAT LAND RECLAMATION

Island/ Tract	Early Attempts at Reclamation	Final Reclamation	Known Major Floods	Present Districts Organized
Bacon	1872-1877	1915	1879	1918
Bishop	1871-73, 1899	1913		
Drexler	1892-93	ca. 1911		
Empire	1909	1909	1955	1918
Franks	1902-06	Flooded 1938	1907, 1936	
Holland	1910	1910		1918
Jones <sup>1</sup>	1870-75	1902	1906-07	1919
King	ca. 1911	ca. 1911		1919
Mandeville	1872	1914	1907, 1938	1918
McDonald <sup>2</sup>	1870-78	ca. 1913	1878, 1913	1818
Medford	ca. 1916	ca. 1916	1936	1919
Mildred	1913	1918-20	1917	1917
Orwood	1903	1903		1918
Palm	1903	1907	1907	1919
Quimby	1913	1913	1936, 1938, 1955	
Rhode	1938	flooded		
Rindge	1873-75	ca. 1919		1919
Venice	1873	1906	1878, 1906, 1907, 1909, 1938, 1950	1918
Victoria	ca. 1899	1900	1901, 1907	1919
Webb	1870-72	ca. 1912	1872-73, 1950	1918
Woodward	ca. 1902	1902		1926

Sources: U.S.B.R. Delta Lowland Reports, Nos. 4, 5, 7, 8, 9; Fallman, Busalacci and McIntosh interviews; assorted maps of San Joaquin County, 1870-1904.

1) including both Upper and Lower Jones Tracts

2) including Henning Tract

bases of from 120 to 150 feet, and could cost as much as \$20,000 per mile. (Stockton Record, March 30, 1919).

The financial backing for Nineteenth Century reclamation had come from fortunes amassed in mining or trade in post-Gold Rush northern California. After 1900, capital flowed into the Delta from a group of southern California investors whose fortunes were derived from the insurance business and from real estate management. As in the case of many of the Nineteenth Century reclaimers, they were men of wide interests to whom the Delta represented only one of many investments. The most common bond between the men whose names appear as directors or incorporators of Delta companies after 1900 was an association with the Pacific Mutual Life Insurance Company, located in Los Angeles. Several were also involved with the Union Oil Company, Southern California Edison, and various finance companies. (Hunt, pp. 76, 81; Who's Who in Los Angeles County, pp. 34, 46; Articles of Incorporation, Pacific Mutual Life Insurance Company, California Delta Farms, Incorporated).

The three most prominent names in this group were those of Frederick Hastings Rindge, George Ira Cochran, and Lee Allen Phillips. Rindge, son of a wealthy New England woolen merchant, inherited a two million dollar estate in 1883. He then bought the Malibu Rancho and moved to California in 1887. His valuable rancho, extending for 25 miles along the southern California coastline, was "one of the great grain, cattle and hog producing properties of the south." Rindge was also involved in forming the Union Oil Company and Southern California Edison, and was known as "one of the most notable actuaries in the country, a man who made and handled millions of dollars for himself and associates." (Robinson, p. 24; Hunt, p. 81; Byron Times Sixth Booster Edition, 1919, p. 109).

When they arrived in Los Angeles in the early 1890's, Cochran and Phillips were both ambitious young attorneys whose family connections gave them possession of the appropriate social and religious credentials to secure personal power in "polite society." Both men's fathers were associated with the University of Southern California, Dr. Phillips as Dean of the College of Arts and Sciences, and Dr. Cochran as Dean of the Maclay College of Theology. (Moore, p. 99). Upon his arrival in 1893, George Cochran immediately organized a corporate law firm which propelled him into the social and economic circles that were transforming southern California. During the financial panic of that year, his able representation as attorney for the Los Angeles Clearinghouse earned for him a widespread reputation for his sound financial advice. Phillips joined Cochran's prestigious law firm in 1894. Renowned for their mastery of the complexities of corporate finance, they were to earn their reputation over the years for work done at their desks and in conference rooms, not in court. Successful in giving corporate advice and attuned to the accelerated pace of business activities in Los Angeles, both men soon

abandoned the practice of law and in 1900 joined with Rindge to form the Conservative Life Insurance Company. Six years later this company was to come to the rescue of the faltering Pacific Mutual Life Insurance Company. (National Cyclopedia of American Biography, v. 28, p. 331, v. 37, p. 218; Articles of Incorporation, Conservative Life Insurance Co.).

Associated with Cochran, Phillips and Rindge were men like Isaac Milbank, John Barnes Miller, and Albert J. Wallace, and their names are in various Delta reclamation companies formed in the early Twentieth Century. Phillips' tenure as Chief Investment Officer and Executive Vice President of Pacific Mutual (1906-1933) paralleled chronologically his involvement in Delta reclamation. His stature as "an astute and sophisticated financier" was well-known and under his guidance, Pacific Mutual enjoyed rapid and prosperous expansion. (Nunis, p. 35). Placing confidence in Phillips' acute financial genius and his bold reclamation scheme, his wealthy business associates invested heavily.

Lee A. Phillips became interested in reclamation as a result of his acquisition of swampland in southern California's Cienega Rancho in lieu of a legal fee. He traveled to Holland to study reclamation methods and later successfully drained his property. (National Cyclopedia of American Biography, v. 28, p. 331). In 1902, Rindge, Cochran, Phillips and other Los Angeles capitalists organized the Middle River Navigation and Canal Company. This organization, predecessor of the better known Middle River Land and Navigation Company, purchased 25,000 acres of tule land in the San Joaquin Delta, apparently at a public sale held by the Pacific States Savings and Loan Company. (Articles of Incorporation, Middle River Navigation and Canal Company; San Francisco Chronicle, April 3, 1937). Over the next few years "through the efforts of Lee Phillips, about five or six different corporations were formed to reclaim one island at a time . . . each corporation taking a different island." (McIntosh interview). These companies, such as the Holland Land and Water Company and the Orwood Land and Water Company, were organized to purchase and reclaim a specific island, as suggested by their names. (McIntosh interview).

In 1912, Phillips consolidated seven of the smaller, single island reclamation companies into California Delta Farms, Incorporated, an \$8,000,000 corporation organized for the purpose of developing and then subdividing nine island tracts. (Stockton Daily Independent, March 30, 1919; Modesto Evening News, April 3, 1919). In 1913, the Company's annual report noted that it had amassed 45,000 acres, with 22,000 already reclaimed and the rest scheduled for reclamation by 1915. California Delta Farms owned and operated eleven dredgers, a floating pumping plant and assorted boats and barges, valued at \$410,000. The report estimated that once fully reclaimed, the land would be worth \$11,801,000. Besides his interests in California Delta Farms, Phillips managed the Rindge Land and Navigation Company's 21,000 acres of Delta lands on Rindge, Upper and Lower Jones and Palm tracts. (Statement of California Delta Farms, Incorporated, 1913).

# CORPORATE RECLAMATION OF LOWLAND DELTA

COMPANY Officers Stockholders, Directors 1910.	City of Primary Residence (if available)	Old River Land and Reclamation Company (1896)	Conservative Life Insurance Co. (1900)	Middle River Farming Co. (1901)	Middle River Navigation & Canal Co. (1902)	California Reclaimed Land Co. (1905)	Holland Land and Water Co. (1905)	Ridge Land & Navigation Co. (1905)	Empire Navigation Co. (1906)	Weyl-Zukerman Co. (1907)	California Delta Farms Inc. (1912,1916)	Victoria Farms Co. (1915)	Woodward Island Co. (1912)	Productive Properties, Ltd. (1920)	Old River Farms Co. (1930)	Empire Farms, Inc. (1931)	Victoria Land Co. (1932)
Atterton, George	St.						X										
Baker, S. L.							X	X									
Bolt, Frank J.							X		X								
Borton, L. L.	SF, St.																X
Burgett, _____	Reno													X			
Burton, George M.	St.						X		X								
Chandler, C. L.							X	X									
Conner, George I.	LA		X	X	X		X	X	X								
Davis, W. H.	LA						X		X								
Deavan, _____	Reno													X			
Dorley, H. S.	LA						X		X								
Finley, _____	Reno															X	
Fleischaker, H.	SF																
Gillis, R. C.				X	X												
Herd, John	St.	X				X											
Jarboe, P. R.		X															
Lace, F. E.		X															
Lyons, G. F. & F. G.	SF							X	X						X		
McClure, S.					X		X		X								
Milback, Isaac	LA						X		X								
Miller, John B.	LA																
Phillips, Len A.	LA		X	X	X	X	X	X	X								
Ridge, F. H. & M. K.	LA		X	X	X												
Shaffer, L. W.	St.						X	X	X								
Shawcross, _____	Reno													X			
Shen, George T.	Berk.															X	
Statts, William R.							X		X								
Wallace, A. J. & F.	LA			X	X		X	X	X								
West, P. A.	St, SF					X											
Weyl, E. M.	St.									X							
Williams, M., R. E., W. J.	LA		X		X		X	X									
Wolf, William H.	SF																
Zuckerman, M. H., RC	St.																

KEY TO CITY ABBREVIATIONS:

Berk. = Berkeley  
LA = Los Angeles  
SF = San Francisco  
St. = Stockton

SOURCES: ARTICLES OF INCORPORATION; FALLMAN INTERVIEW; MCINTOSH INTERVIEW; BYRON TIMES; STOCKER/DEVELOPMENT EDITIONS (1910-1932)

Lee Phillips and his various companies, together with the Rindge interests, reclaimed the central Delta, the difficult peat lands that had brought grief to such Nineteenth Century reclaimers as Henry D. Bacon. Ample investment in dredges and competent engineers such as California Delta Farms' Chief Engineer, George Atherton, made the transformation possible. One or more dredgers would work around an island, often straightening island contours, sacrificing peninsulas in order to build a stronger levee. When the levee was nearly ready to close, two or more dredgers would be brought in to speed up the process. Once Phillips and Atherton had a secure levee established, the company contracted with George Shima, who

"dyked the islets, dug transverse ditches for drainage, and installed machinery to pump the superfluous water into the river. The virgin soil was then steam-ploughed and permitted to lie fallow for a few years to enable the brush and tule to rot and fertilize the ground. After this preparation, the reclaimed land was tested and found ideal for the cultivation of potatoes." (Pajus, p. 85).

Phillips and his associates had never intended to become agriculturalists; their land development investment was aimed at the resale of the tracts they had reclaimed from the tules. However, it was deemed prudent to withhold the newly reclaimed lands from the market for a few years to be sure that the levees were sound before offering them for sale. During the interim period California Delta Farms and other companies leased their acreage to tenants, just as Delta land owners had been doing since the 1870's. The California Delta Farms' 1913 Annual Statement noted that all of the lands reclaimed to that date were "being leased for a term of years for a cash rent. The balance of the land will be ready for leasing January 1, 1916." (Statement of California Delta Farms, Incorporated, 1913). The report detailed the high yields to be expected from the rich Delta peat, and noted that "the plan of the company is to rent in large acreage, but in the near future to commence the subdivision into small tracts and sale thereof. Heretofore, none of the lands in this section have been offered for sale." (Statement of California Delta Farms, Incorporated, 1913).

California Delta Farms was not alone in its plan for subdivision. As late as 1925, the San Francisco-based Wright Corporation, a relatively minor reclaimer, was also plainly motivated by the potential profits of land sales. "The business of the Wright Corporation in truth, is, to reclaim lands, make agricultural land more productive, and to demonstrate the fertility by farming such land at a profit until it is subdivided and sold to great advantage." (Byron Times Ninth Development Edition, 1924-25, p. 188). The emphasis on profits from land sales rather than retention meant that the Twentieth Century reclamation speculators were pursuing the same essential course as George D. Roberts and many of the entrepreneurs who came after him. The basic patterns of corporate development remained substantially unbroken.



## Farming Operations

A great deal, if not most, of the actual farming done in the Delta in the first two decades of the Twentieth Century was done by Chinese and Japanese tenants and laborers. Land-owners set up farms on their islands of various sizes and equipped them for occupation by tenants. On Victoria Island, for example, more than 5,000 acres were leased to tenants at an annual rent of \$25.00 per acre. The remainder of the 7,300-acre island was tilled on shares. There were forty farms on the island, each equipped with houses, sheds, barns, and river landings and averaging about 200 acres in size. (Byron Times Third Booster Edition, 1912, p. 72). The 21,300 acres of the Rindge Land and Navigation Company were

"all rented to responsible tenants, and each tract of land is under cultivation. The present policy of the company is for short leases, except in cases where the crop desired to be grown requires a long term. Rent collections are easily made and tenants are always glad to locate on these lands, leasing tracts from 100 acres and up." (Byron Times Third Booster Edition, 1912, pp. 68-69).

California Delta Farms followed the accepted Delta pattern of tenantry in the years following reclamation, with the records of Contra Costa County, for example, showing numerous leases, with those in 1917-1919 being largely to Japanese. (Contra Costa County Recorder's Office record books).

Asian labor had helped build the Delta's first levees and the Chinese had continued to be an integral part of the Delta's economic structure. In the last decade of the Nineteenth Century Japanese immigration contributed another Oriental labor force for California agriculture. Most of these Japanese immigrants were single males, with no family ties in California and thus useful in migratory, seasonal jobs. Japanese "bosses" organized their countrymen into gangs and acted as contractors, negotiating with the landowners to supply a reliable pool of labor at a fixed price. (Iwata, p. 28; Naka, p. 51).

Not only were the Chinese and Japanese useful as laborers, they were valuable as tenants as well. An article in the Saturday Evening Post in 1911 remarked

"the majority of these alien farmers are notably prosperous and successful. It is hard to find many real failures among them . . . and the lessons taught by the humble and heathen John (Chinese) are peculiarly modern and progressive, in that they apply as much to the business operation of the farm as to the art of securing a heavy yield from small acreage." (Crissey, September 16, 1911, p. 15).

Japanese tenants were in demand by Delta landlords because of their willingness to pay higher shares or cash rents, to make improvements upon lands, and to tolerate housing conditions unacceptable to white tenants. Furthermore, to landowners who operated on a crop-share basis, the higher yields brought by Japanese tenants meant higher profits. (Iwata, pp. 27-29).

Some of the Asian tenant farmers became substantial entrepreneurs. Bing Kee, who came to the Delta in 1905, by 1912 had in cultivation fields of various sizes on Jersey, Veale, Brack, Terminous, Bradford and Byron tracts (Byron Times Third Booster Edition, 1912, p. 131). In 1913 he had farmed 2,700 acres on leases on Byron Tract alone, and was known as "one of the big Chinese farmers of this country." (Byron Times Third Booster Edition, 1912, p. 80).

One of the most notable of the large-scale Asian farm operators was George T. Shima, the near-legendary "potato king" of the Sacramento-San Joaquin Delta. Born in Nagasaki in the 1850's, he attended an agricultural school and was converted to Christianity. He came to California in the early 1880's, working first for Arthur Thornton in the New Hope area of San Joaquin County. A fifteen-acre farm near Woodbridge gave Shima an apprenticeship in potato growing and he prospered to the point that he could engage in reclamation work at Bradford Island in 1899. (Naka, p. 56; Rogers, July 4, November 11, 1951). Shima's greatest success was to come as a result of his close business relationship with Lee A. Phillips. The two men worked together on an oral agreement that Phillips would buy and levee new lands and then lease them to Shima for three years for the cultivation of potatoes. Bouldin Island was one island reclaimed and cultivated on such an agreement. (Thompson, pp. 234-236).

Shima helped create conditions favorable to the transition of the Japanese from wage earners to tenants since he frequently subleased land to other tenants. On his own acreage, Shima reportedly organized work to distribute it throughout the year. Variations in the number of workmen he employed each month were very slight. Reclamation work occupied the winter months, potatoes were planted in the spring and early summer, and digging began about mid-June continuing until early May the following year. Shima's workers, therefore, did not "move to and fro in search of work," nor were they "forced to take up their (winter) quarters in the city." Because of these favorable working conditions, his employees stayed with him "for some years" or "quite a considerable time." (Naka, p. 58).

Although undeniably successful as farmers, the Japanese and Chinese tenants ran afoul of an anti-Asian feeling that was deeply rooted in California history. Anti-Chinese agitation had marked the 1870's and a similar movement grew in response to the influx of Japanese around the turn-of-the-century. Responding to general anti-Japanese feeling in the rural districts of the State, the Legislature passed laws in 1913 that made it difficult for aliens to lease or own land in California. (Iwata, pp. 25, 29). The law was circumvented by having land put in the names of minor children,

or having cooperative whites "own" the land for the alien farmer. During the war years (1914-1918), industrial expansion and high wages in factories combined to drain rural California of its agricultural labor force. With high wartime profits and opportunity to expand operations, alien tenants made notable progress between 1914 and 1918. While anti-alien activity calmed during the first World War, the issue heated up again as alien tenants once again came into economic competition with returning soldiers and unemployed war industry workers. Throughout 1919, hostile feelings intensified, culminating in the passage the following year of a tougher law that effectively removed many Asian tenants from Delta fields. "The amended law deprived the Japanese (and other aliens) of the right to lease agricultural land and to act as guardian for a native-born minor if his estate consisted of property which the Japanese could not hold under law." (Iwata, pp. 29-31).

George T. Shima should have been a major victim of the 1920 anti-alien legislation, but it appears that he was able to find sufficient loopholes to continue his large-scale operations. Rather than using his own name, Shima may have operated through corporations such as the Empire Navigation Company or by the agency of Reno investors who with Shima organized the Nevada-based Empire Farms, Incorporated, in 1931. (Rogers, July 20, 1951; Articles of Incorporation, Empire Farms, Incorporated). Shima's actions suggest that there were several ways of circumventing California's restrictive statutes, providing one had sufficient money and legal advice. Popular reports that he owned this or that island in the 1920's, including the story of the trade with Lee Phillips that gave King Island to Phillips in exchange for Mandeville Island, are almost certainly over-simplified. It would probably be more accurate to say lands were controlled by Shima rather than owned by him personally. The question of precisely how George Shima operated in spite of the Alien Land Law is one that deserves further study.

Leasing, to Shima or to anyone else, was not the long-term goal of the investors who put money into Delta reclamation. Real estate sales of improved farms rather than agricultural operations were the hoped-for result of the reclamation process. California Delta Farms was the largest single holder of newly-reclaimed land; lands that were to be farmed by tenants only long enough to prove their value and establish the security of the levee systems. Some tracts, such as Mandeville or McDonald islands, were not offered for subdivision, having been transferred to members of the Phillips-California Delta Farms group such as the Zuckerman family.

By the end of the first World War, it was felt that the reclaimed lands had demonstrated their profitability and value, and California Delta Farms moved toward the final liquidation of its island properties in 1919 and 1920. Northern California newspapers in the spring of 1919 were full of articles detailing

the proposed sales. Headlines read "Delta Farms on Market Now in Small Tracts; Lee A. Phillips and Associates Make it Possible for All to Enjoy Good Land; Forty Thousand Acres Are on Sale Soon on Twenty-Year Payment Plan". (Stockton Independent, March 30, 1919); "Fortunes in Delta Lands." (Byron Times, April 18, 1919); "Delta Farms Subdivided for Homeseekers." (San Francisco Chronicle, April 5, 1919). The sale of Delta lands attracted men and money from across the country, as well as overseas buyers. It was reported that "even delegates to the Foreign Trades Convention have shown an interest." (San Francisco Bulletin, May 15, 1920). An additional attraction lay in the assurance that California Delta Farms would assist the new owner in the leasing of lands sold, free of charge:

"Anyone, even though he may not be a practical farmer, can buy and make large profits from the rich peat lands opened for sale by the California Delta Farms, Inc. The company's offer to lease lands for those not wishing to farm for themselves gives the investor returns for the money he invests." (Stockton Independent, May 4, 1919).

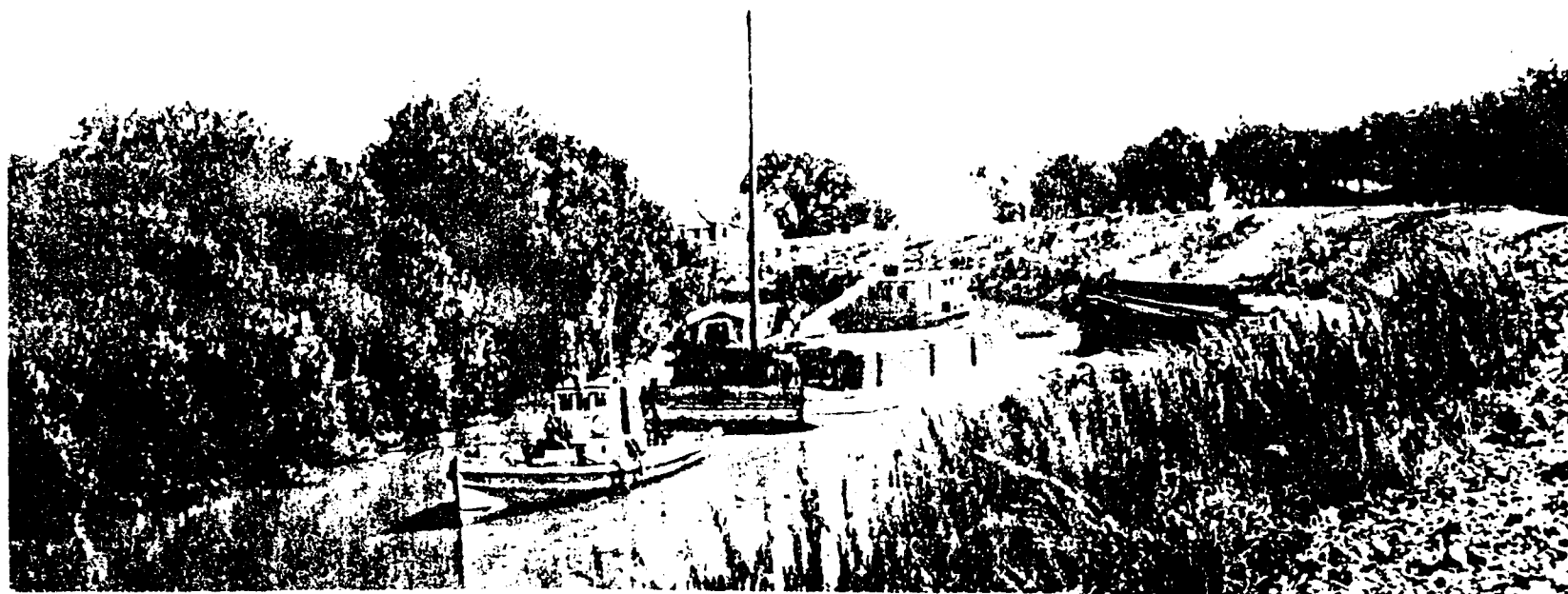
Returns were guaranteed, California Delta Farms told prospective buyers, for unlike investments in gold mines or other speculative ventures, the peat lands "hold gold for everybody that will work them or own them." (Stockton Independent, May 4, 1919). Besides the attraction of high yields, the peat lands were also advertised as attractive on the basis of proximity to cheap transportation:

"On all the holdings of the company (California Delta Farms) the subdivisions will be made to best suit individual conditions. Each farmer will have a landing on the river . . . numerous river steamers, barges and motorboats touch at all landings to discharge and receive mail, crops and supplies. Cheap water (transportation) reduces freight rates to a minimum . . .

Four hundred miles of navigable waterways wind in and out through the Delta. Every tract is accessible to the San Joaquin River or its tributaries. Passengers and freight boats operate out of Stockton, several lines furnishing an ideal schedule. The Santa Fe Railway traverses the country to Stockton, and the Borden Highway is the main link from the Byron country, passing within four miles of Orwood, with connections to the tract." (Byron Times, April 18, 1919).



"Barge Loading Hay on the Sacramento River" (Byron Times Seventh Booster Edition, 1920-21, p.162



"A Barge Load of Barley leaving the Headquarters Camp on Elk Canal"  
(Byron Times Seventh Booster Edition, 1920-21, P. 162)

The promotional campaign conveniently overlooked some of the hazards associated with land ownership in the Delta. The insecurity of the levees was probably the major difficulty. As recently as 1907, a flood had topped almost every levee in the Delta, and in 1938, flood waters inundated Venice Island and Franks Tract, forcing the complete abandonment of the latter island. The problems of levee maintenance were made worse by the subsidence of the reclaimed islands. The land level can sink an inch or two a year as a result of oxidation of the organic soils, compaction, wind erosion or burning. (SWRCB Draft EIR, III - 125). The fact that land elevations in the Delta islands are often significantly below mean sea level contributes to increased seepage control and drainage costs as well as to the expense of maintaining and strengthening the levees.

The peat islands were susceptible to damage not only from floods, but fires, because the organic soil itself could burn. During the summer of 1934, the barley crop on Webb Tract caught fire, burning with such intensity that paint peeled from the farm equipment, and sacks of burning grain glowed red like coals. Fire swept across the island, igniting fuel tanks and destroying sheds. The fire was extinguished by quick thinking on the part of the island superintendent, who ordered that twelve cuts be made in the levee to flood the island. This stopped the fire and extinguished the peat that otherwise might have burned to a considerable depth. (Fallman interview; McIntosh interview).

Even with the peat intact, the Delta soil was not an inexhaustible resource. The islands could be overworked and soil diseases could impair some crops; potatoes, for example, grew well in virgin soil, but after a few years often fell victim to disease. Empire Tract became so "sour and overworked" that it was subjected to controlled flooding in 1929 in an attempt, apparently successful, to restore its fertility. (Fallman interview).

California Delta Farms sales campaign in 1919-20 managed to promptly dispose of the tracts offered for sale. In the first year of this campaign, over \$7,000,000 in Delta lands were sold, and by June, 1920, newspapers reported that California Delta Farms had only nineteen farms remaining. (San Francisco Examiner, June 5, 1920; San Francisco Bulletin, June 26, 1920). A large number of its subdivisions passed into the hands of farmers in small tracts of 80 acres and up, but much of the company's advertising was an attempt to attract "investors" who might "rent . . . this rich land at a high figure" to tenants. (Stockton Daily Independent, May 11, 1919; Stockton Record, May 3, 1919). Arthur C. Parsons, exclusive land agent for California Delta Farms, heavily publicized the "important sale" of 240 acres on the Orwood Tract to B. F. Walker, a Stockton physician. His success, Parsons hoped, would enduce "buyers in various lines of business and the professions" to "grow proportionally in number with the farmers." (Stockton Independent, May 11, 1919).



SCENE ON THE CAMPS OF THE DR. B. F. WALKER ACREAGE ON THE  
ORWOOD TRACT IN THE CONTRA COSTA DELTA

(Byron Times Eighth Booster Edition,  
1922-23)

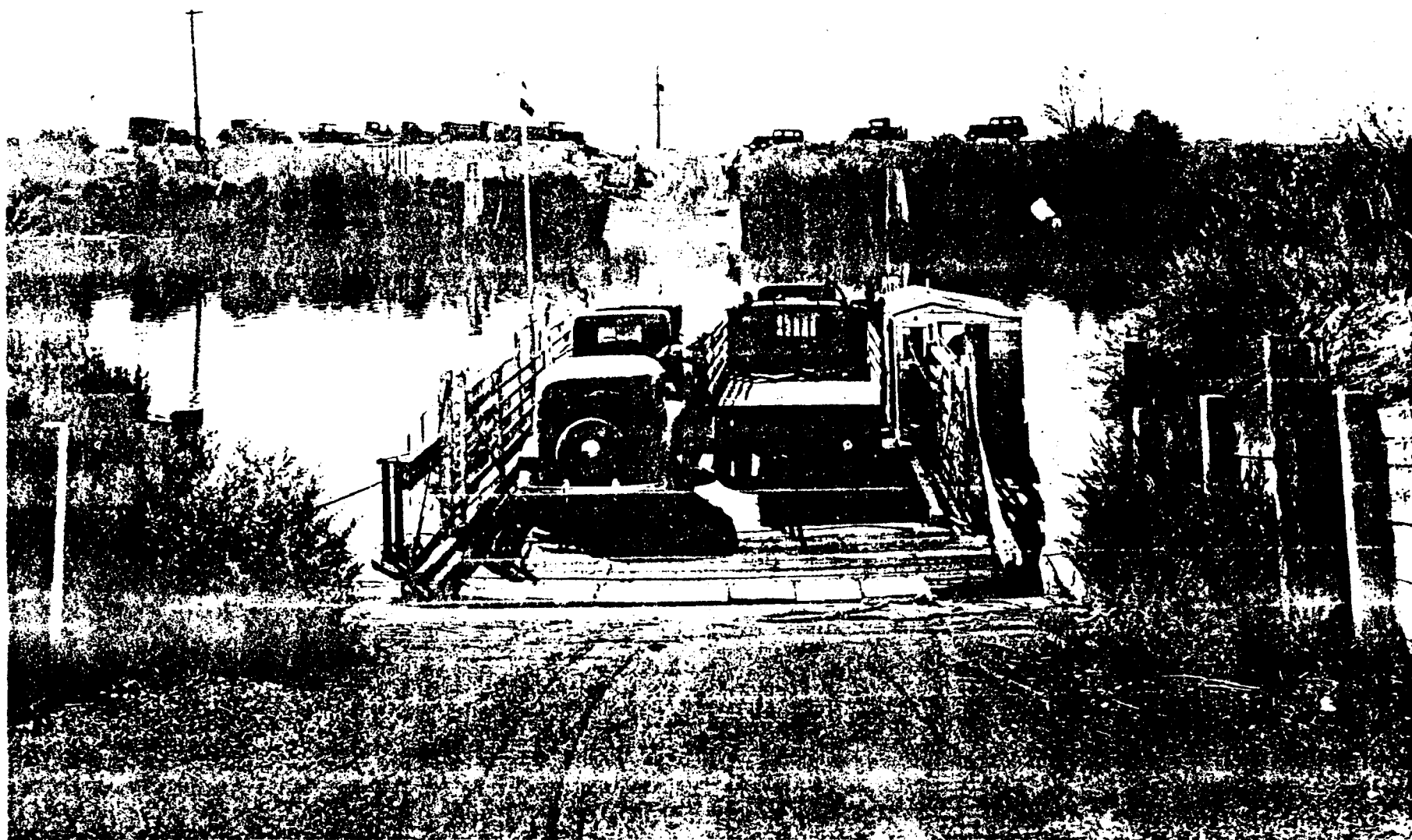
The sale of California Delta Farms lands coincided closely with the passage of the anti-alien land legislation of 1920 that severely restricted Asians from owning or leasing land. Linked both to the subdivision and sale of lands and the new restrictions placed on aliens was a movement for "a white Delta." The impulse to remove Asians from the Delta has received little or no formal study, but anti-Japanese sentiment was commonplace after 1919. In an article on the Delta land sales program, the Byron Times noted that the "highest state of development" would come to the peat lands when the large tracts were held in small holdings farmed by the landowner himself. "But", the article continued,

"...the best story of all is yet to come. When the Orientals have been succeeded by the white race, and the families of Americans are assisting in the work of production, then will come the returns to swell the accounts of those who had faith and a purpose in delving into the soil for the great riches that lie beneath the peat." (Byron Times, April 18, 1919).

In another article, the Old River Farms Company, which was considering subdivision of its property, noted the advantages in creating "a country farmed and owned by WHITE PEOPLE -- the real dream of Delta land owners." (Byron Times Seventh Booster Edition, 1920-1921, p. 222).

Development of good overland transportation routes through the Delta was also closely connected to California Delta Farms' land sales and the desire to settle "Americans" on Delta farm lands. Until the early years of the 1920's, county road development in the Delta was not deemed justified because of the lack of permanent farmers on the islands. As a result of California Delta Farms' selling campaign, many white families were settled on Holland Tract by 1922. In that year, the residents petitioned the County Supervisors for the construction of a trestle bridge connecting Holland Tract to the mainland. Local newspapers reported that the county and California Delta Farms planned to jointly finance the construction of ferries connecting Holland, Franks, and Webb tracts. (Byron Times, May 26, 1922). The impact of improved transportation on Delta settlement patterns was noted by John P. Irish, one-time defender of Asian immigration and a Franks Tract resident: "The coming of good roads and bridges and American families into the Delta of Contra Costa and San Joaquin is going to spell another chapter in the campaign to 'make the Delta white'." (Byron Times, April 28, 1922).





**WITH ONLY A FERRYBOAT TO CARE FOR THE HEAVY DELTA TRAFFIC!**

*Scene on Old River, at the Clifton Ferry Crossing, between the Great Union Island and Clifton Court Districts. Building of a bridge connecting these rich Delta sections will mean the placing of thousands of the most fertile acres in Central California in an advantageous position. Here lies a principality that can and will be made into the mightiest of vegetable kingdoms, but little progress can be made with only a ferryboat to depend upon. Won't the Supervisors of Contra Costa and San Joaquin counties and the city of Stockton and land owners as well get together and change the picture?*

*—Remarkable photograph by the Logan Studios of Stockton, taken expressly for the Development Edition of the "Byron Times."*

(Byron Times Sixteenth Development Edition,  
1936-37, p. 88).

California Delta Farms' success in profitably disposing of its lands was short-lived. By 1921 an agricultural depression had spread across California that would continue for years. The purchasers of California Delta Farms' real estate defaulted in their payments and the company was forced to foreclose, leaving it with thousands of acres to operate once more. California Delta Farms was again forced to find tenants to operate its islands, but now the movement for Asian exclusion backfired by depriving the company of its best potential tenants. The shortage of suitable tenants was noted by Jesse V. Mendenhall, newly appointed president of California Delta Farms, in his 1921 annual report to stockholders. He expressed the hope that a recently established government agricultural training school on Rough and Ready Island would train ex-soldiers to "replace our alien tenants." (Byron Times, February 3, 1922). Although it is impossible to say at this time what impact this training facility had on alleviating Delta labor shortages, the school hoped to graduate 500 trained agriculturalists in each of the ensuing five years. (Byron Times, February 3, 1922).

C. I. D. Moore, author of a biography of George Cochran, wrote in 1935 that the alien land laws were responsible for many of the problems encountered by Delta companies after 1920.

"This reclamation achievement at first and for several years was very profitable for everyone who had invested in it. The land was leased to Japanese tenants and produced heavy crops. Then came the California Alien Land Laws in 1920, which made it impossible for Japanese and other aliens to own or lease land in this State. This deprived these Delta companies of their tenants and gave them a set-back from which they have not thus far recovered. Then followed the unfavorable market conditions that have existed throughout much of the intervening years. While the lands are now leased and being cultivated, the high degree of prosperity that existed under Japanese tenancy has not yet returned." (Moore, pp. 171-172).

California Delta Farms' annual report described 1921 as the company's "most difficult period." It received only \$22,876 in rents, while \$13,414 in uncollected rents "had to be written off," and company officials complained that their discouraging situation "will be unavoidable until farming and financial conditions improve." (San Francisco Call, January 30, 1922). The prolonged agricultural depression and the impact of the alien land laws forced California Delta Farms to remain in agricultural management until the late 1930's and into the 1940's.

In the wake of the setback to California Delta Farms' planned liquidation of its holdings, Lee A. Phillips resigned the

presidency of the company. Although he remained active on its Board of Directors, Phillips, a powerful Los Angeles financier, was unwilling to run the mundane, day-to-day affairs of what had become a large-scale land leasing business. (Los Angeles Times, September 21, 1921; Byron Times, October 14, 1921; McIntosh interview). The new president was Jesse V. Mendenhall, who was also president of the Holland Land and Water Company, another of the corporations dominated by Los Angeles financial interests. (San Francisco Chronicle, November 11, 1921). Mendenhall's headquarters were to be in Stockton, and the Byron Times noted that he "is not only conversant with all local Delta conditions, but he is here on the ground, and will devote his time to the direct administration of the company's interests, from its headquarters in Stockton." (Byron Times, October 14, 1921). This shift in management seems to indicate that the company realized that it was now forced to actively manage its property, rather than merely sell it at a good profit. For the next ten years the company primarily leased land to tenants, a 1927 advertisement in the Byron Times Tenth Development Edition proclaiming that "Now you can rent this fertile land!" (Byron Times Tenth Development Edition, 1926-1927, p. 191).

Despite being forced to return to active management and leasing of their lands, large companies such as California Delta Farms remained interested in selling the lands that they controlled. John J. McIntosh noted that the companies' main function was to sell "real estate -- they only rented the land until they could find somebody to buy it." (McIntosh interview). Mendenhall wrote in an article entitled "The Delta -- A Challenge to Action", that "now that the non-homeseeeking Oriental is departing," the Delta must be opened for immigrants from the eastern states. "Following the completion of major development programs of the big colonization projects, success to the new host of incoming farmers will be brought within reach through right prices, liberal terms and expert farming advice . . . and other questions that are of vital concern to the newcomer's sustained welfare." He also defended the role of the large reclamation companies, stating that reclamation was the result of "the daring investment of millions of outside capital." (Byron Times Ninth Development Edition, 1924-1925, p. 184).

In 1930, Lee Phillips set up another corporation, Productive Properties, Ltd., which acquired islands from California Delta Farms through the purchase of California Delta Farms reclamation bonds that were in default after 1928. Phillips bought the bonds that had a face value of from \$100 to \$1,000 a piece for amounts that varied from par down to a mere \$5.00 each. The bonds were then converted into stock in the new company. As a result of these financial machinations, California Delta Farms was left in 1935 with only King Island and Bishop Tract, while Productive Properties, Ltd., controlled 18,000 acres, including Webb, Orwood and Holland tracts. Phillips also held property under the name

of Lee Phillips, Incorporated. (Fallman interview; McIntosh interview; Articles of Incorporation, Productive Properties Ltd.). In August 1937, Productive Properties reduced its capital stock from \$2,400,000 to \$370,000 by retiring stock in exchange for land; one share of stock being traded for one acre of land. A major beneficiary was Phillips himself, because he held a large amount of stock. (Articles of Incorporation, Productive Properties Ltd.; Fallman interview). By October, 1938, several months after Lee Phillips' death, California Delta Farms was in control of Productive Properties, the combined organization still having 22,000 acres of land; 15,000 in the name of Productive Properties. (Rural Observer, September/October, 1938, pp. 10-11). During the next ten years the two companies sold their Delta holdings, legally dissolving both concerns in 1948. (Articles of Incorporation, California Delta Farms, Productive Properties; McIntosh interview).

The dissolution of the greatest of the Twentieth Century reclamation companies brought to a close the era of Delta reclamation. Small holdings that existed in the 1850's and the 1860's had been consolidated by financial investors interested in the improvement and resale of Delta acreage. The Nineteenth Century entrepreneurs' greatest successes came in the reclamation of lands on the fringes of the peat lands in the heart of the Delta, leaving to Twentieth Century investors the final task of reclaiming the swamp lands. While the pattern of corporate reclamation, risking substantial capital in the hope of profitable land sales, required the ownership of huge acreages during the actual reclamation process, the intention to sell land rather than retain it after reclamation that marked many of the enterprises from the Tide Lands Reclamation Company to Productive Properties, Ltd., guaranteed the restoration of smaller land holdings. Subdivision and sale has resulted in the land ownership pattern evident today of sizes ranging from a few hundred acres to whole islands, some still farmed on lease arrangements. The era of reclamation has passed, but its marks on the land and the economy of the Delta region remain indelible.

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Stockton Record, March 30, 1919; May 3, 1919; October 14, 1922

## HISTORIC RESOURCES OF THE SACRAMENTO-SAN JOAQUIN DELTA

The waterways of the Sacramento-San Joaquin Delta are themselves historical artifacts of a sort, since the rivers and sloughs that existed prior to reclamation have been dredged, deepened and straightened, or even dammed off altogether, while new cuts have been opened by dredgers. Boaters and others using the network of channels may see little evidence of the modifications of the sloughs and all but the straightest of cuts might seem "natural" to contemporary observers. These waterways, however, contain other evidence of human activity in the form of a bewildering array of pilings, derelict structures, wrecked boats and more. This section will deal with the kinds of historic artifacts observed and researched during the project and list the most notable of the historic resources in the project area in or near the waterways.

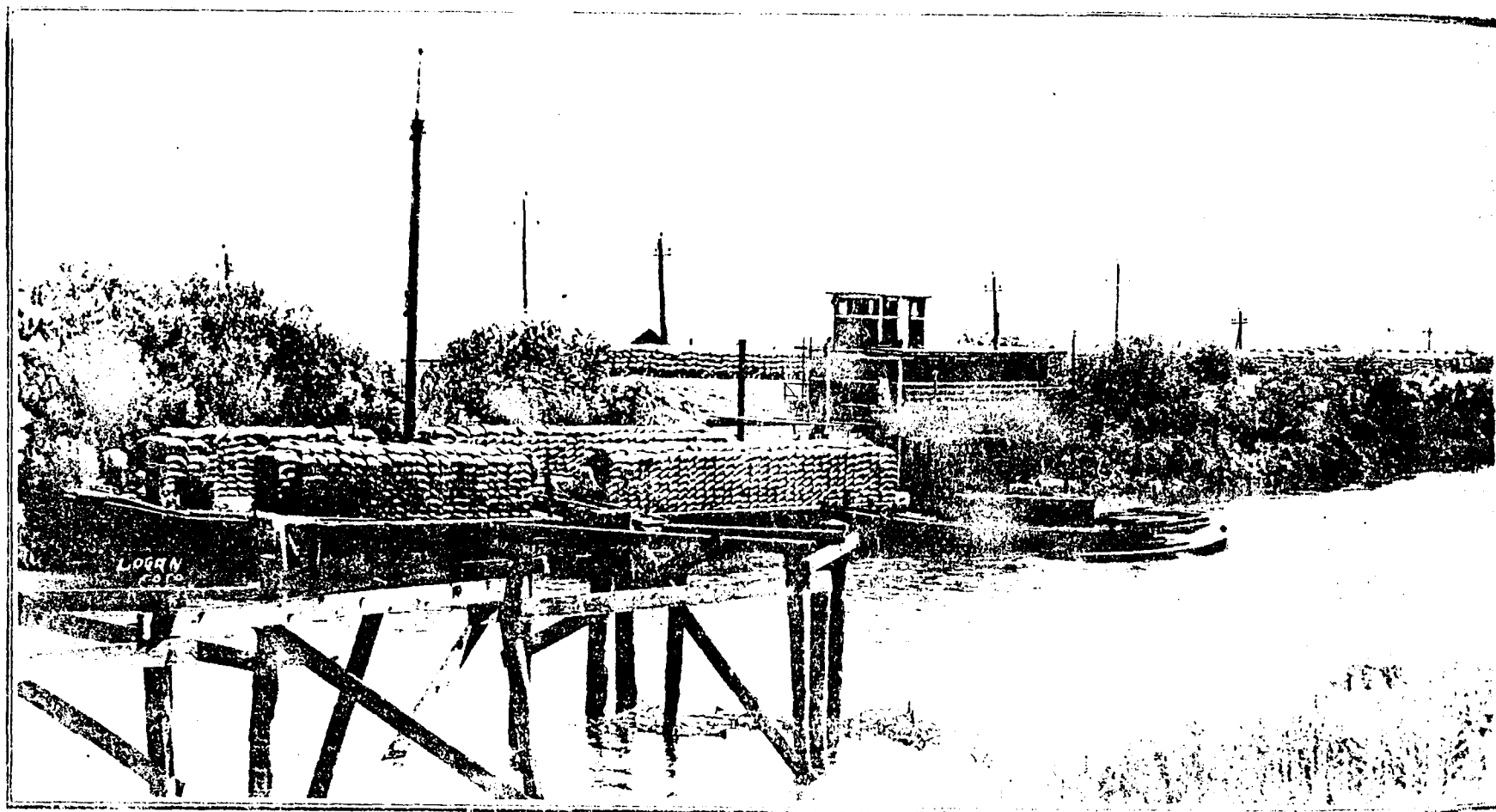
### Artifacts in the Waterways: Pilings

Pilings of all descriptions are the most common artifacts in the waterways. Some appear in rows or clusters, some singly, and all show varying degrees of wear or deterioration. Some pilings, of course, are of recent origin and still in use. The older ones, however, are plentiful and can be categorized according to their historic associations.

#### 1. Camp Landings

Agriculture on the reclaimed tracts was usually left in the hands of tenants who operated portions of the island. Without nearby towns or other private residences, laborers were housed on the islands in camps that became the natural focus of activity. Barracks, barns, equipment sheds, and houses for tenants or foremen were common at these locations and often processing equipment for crops was installed at the camps. Agricultural produce was taken off the islands, often at the camps, by boat or barge until the mid-Twentieth Century. Communication and personal travel was also by water. Thus each camp had a landing.



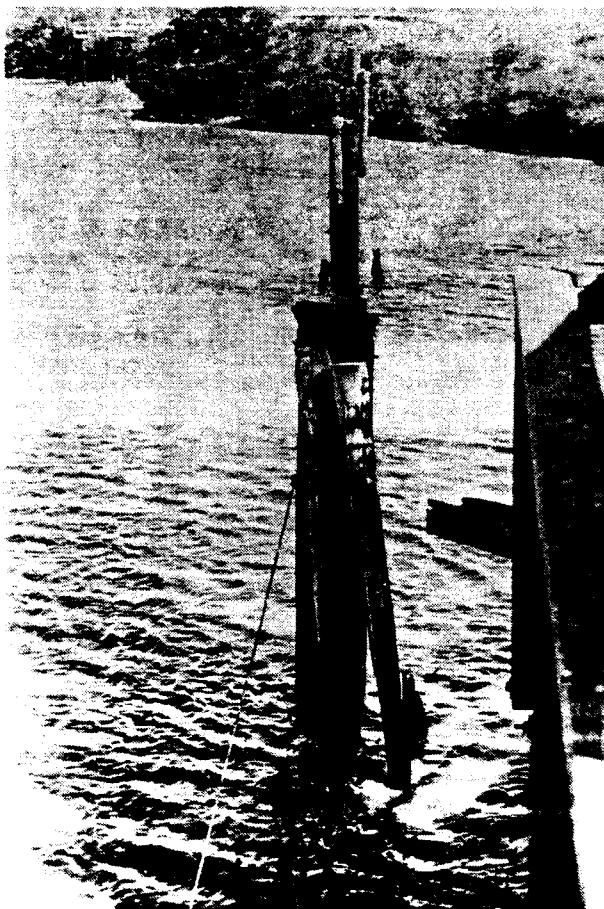


ISLAND TRANSPORTATION COMPANY'S LARGE LOAN WITH BARLEY

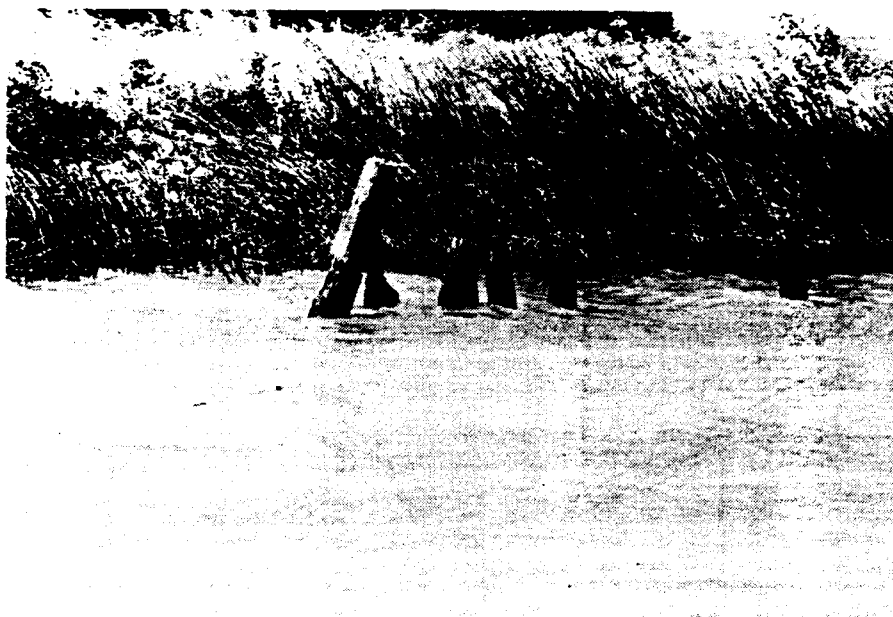
Tens of Sacks Are Stacked On the Barge

From a photograph by the Island Steamship Co.

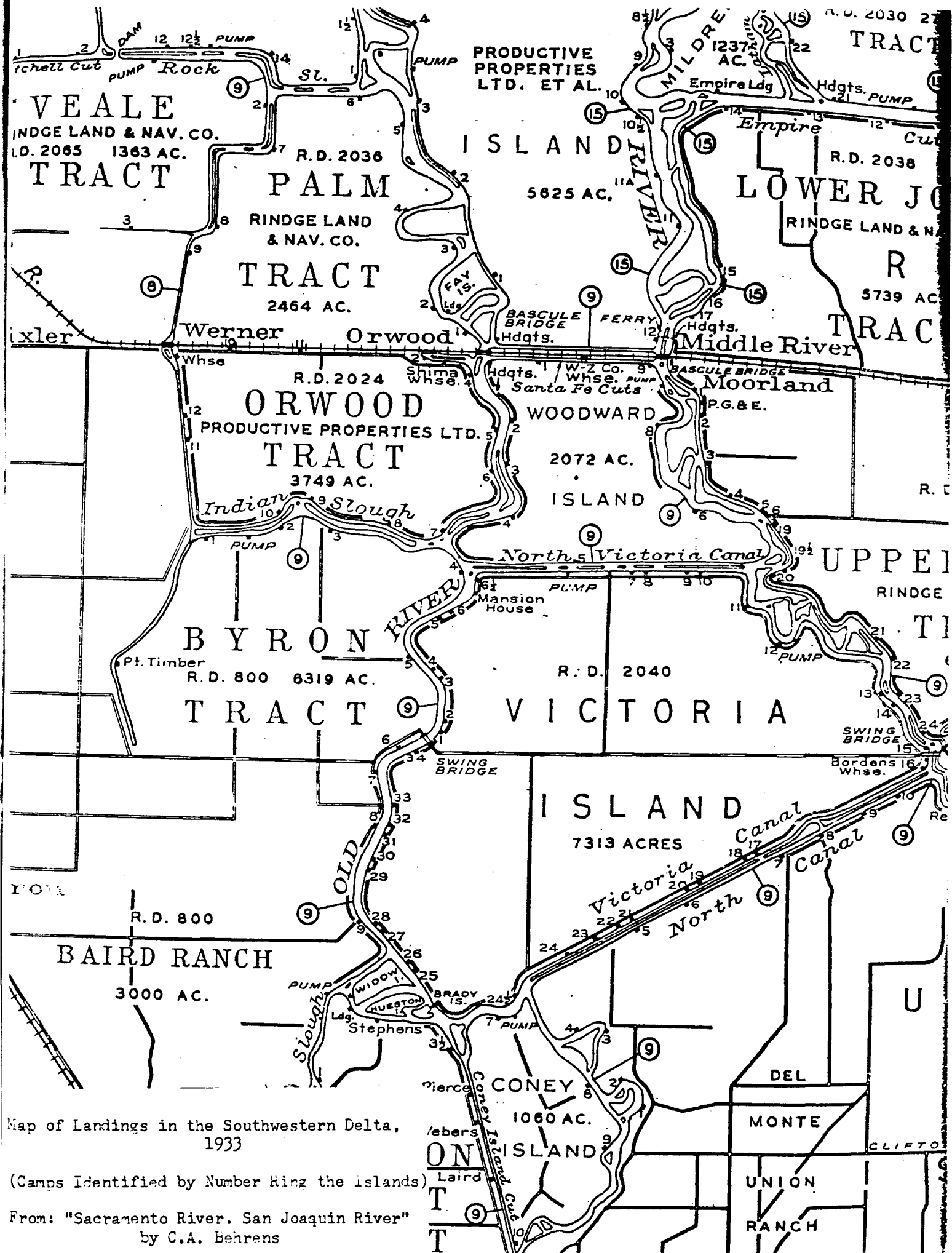
(Byron Times Seventh Booster Edition, 1920-21, p. 142)



Dolphins in front of Haas Slough Beet Dump



Derelict Pilings (North Shore Bouldin Island  
South Fork of the Mokelumne River)  
Derelict Pilings are Common in the Delta

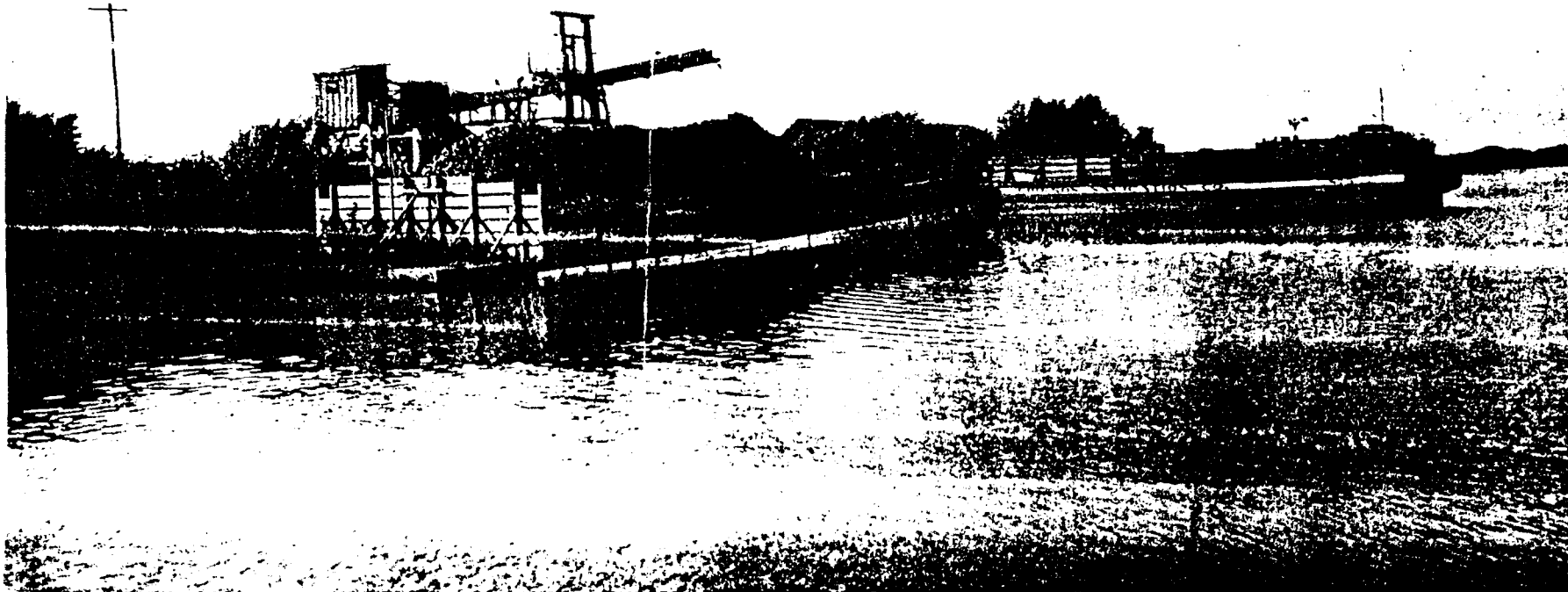


From viewing the remains of landings throughout the project area some rather speculative generalizations can be made. Blueprints or plans for landings are apparently non-existent, suggesting that they were relatively simple and routinely constructed, the details being considered common knowledge by those concerned. Some islands had remarkably well-built landings; Tony Busalacci recalled the Victoria Island had sturdy landings and our own observations indicate that McDonald Island's Twentieth Century structures were solidly made. A typical landing had a small pier or floating dock for passenger and light freight movement. Stronger pilings, perhaps in a row, extended along the levee bank to be used in securing barges or large boats for gang-plank loading and unloading of crops, seed, machinery or other bulky cargo. Variations on this typical design might range all the way from a complete absence of dockage pilings where a steamer or tug would simply nose into a cleared area on the levee and secure its lines to nearby trees or perhaps deadmen (cables attached to logs buried in the levee) to the installation of bulkheads or dolphins (tight clusters of pilings bound together at the top) for the safe mooring of large vessels. Few places in the Delta had wharf facilities similar to those found in ports; rather the use of the gang-plank was the rule in cargo handling. The design and construction of landings depended primarily on the owner of the adjacent land and perhaps on the anticipated volume and type of traffic. It would appear that there was little change in landing design over the years, with those of earlier vintage being substantially the same as more modern ones and similar to some dockages still in occasional use.

## 2. Sugar Beet Dumps

In the late 1920's and early 1930's, the cultivation of sugar beets spread throughout large sections of the Delta. The beets were not handled in bags or boxes as onions, potatoes, asparagus, celery or even grain had been but in bulk on barges. The barges were loaded at what was termed a "beet dump", which consisted of a hopper into which beets were unloaded from farm trucks or wagons and a conveyor belt extending out over the water. Barges were then moored under the conveyor and the beets dumped into them. In contrast to camp landings, beet dumps are well documented since their installation required a permit from the U. S. Army Corps of Engineers and the filing of plans. Corps permit files indicate that most beet dumps were installed by the sugar refining companies rather than the landowners or growers.

Beet dumps were among the best constructed structures on the waterways. Heavy pilings supported the conveyor machinery at the outer edge of the levee and substantial dolphins were placed on either side for the mooring of barges. Other piles nearby were used to moor barges waiting their turn at the conveyor or those already filled waiting for a tug. For comments on a surviving beet dump, see the list of specific historic resources below.



**BARGE OF THE ERIKSON NAVIGATION COMPANY AT THE KING ISLAND LANDING**

*Being loaded with sugar beets from the Al Westgate acreage for the Holly Sugar Company's factory at Tracy. Barges Nos. 3 and 5 are shown in the picture, which was taken October 11, 1929. The beets can be seen dropping from the outboard conveyor. They are partially cleaned in the process of passing from wagon to barge. One of the sights of the Delta are these great barges, loaded to the top, being towed up stream to Tracy. The Erikson Company transports thousands of tons of products from the "Island" country each year.*

—Beautiful Photograph by the Logan Studio of Stockton, Taken Expressly for the Twelfth Development Edition of the "Byron Times"

Barges at Beet Dump on King Island, 1929

"Byron Times Twelfth Development Edition"

### 3. Structural Support Pilings

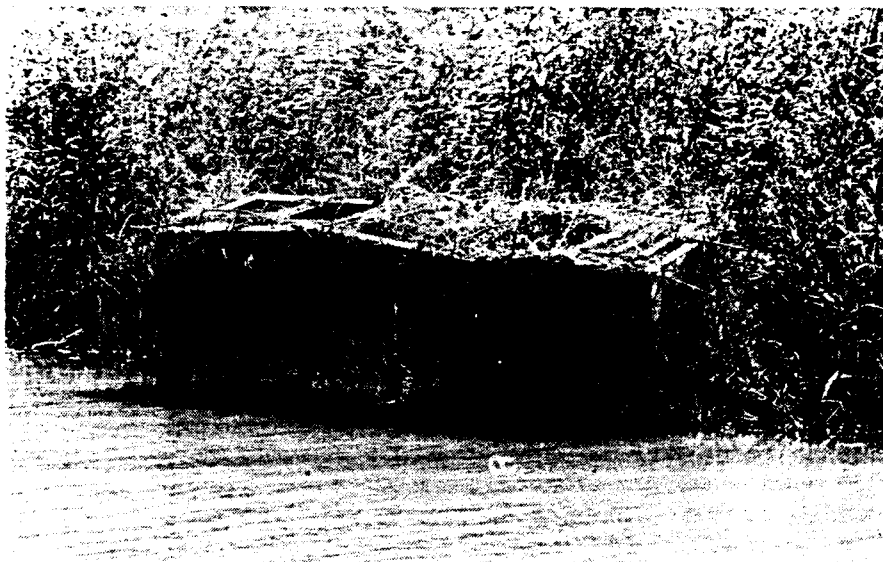
Warehouses, canneries and other structures, probably most commonly packing or processing sheds at camps, were at times built on the water side of the levees, extending at least partially out over the water. These structures rested on pilings. Identification of these pilings can be difficult if no structural remains exist since the derelict pilings might resemble the remains of a landing. Documentary evidence provides the only reasonable verification if such evidence is sufficiently detailed and specific.

### 4. Fishing Camps

Until 1933, commercial market fishing was permitted in Delta waters, with catfish, striped bass and salmon being taken for sale. The fishermen often lived on small islands or berms that had been by-passed by the reclamation process. Their camps were lightly-built residences and their piers or floating docks were also light and generally simply constructed.

### 5. Recreational Facilities

The Delta marshes have always attracted hunters and fishermen although market hunting and commercial fishing predominated into the Twentieth Century. The years since World War II have seen a vast increase in leisure time with the recreational use of the waterways by boaters, waterskiers, fishermen and hunters increasing. For the most part, these activities have resulted in such "artifacts" as lightly-built docks, duckblinds or even floating cabins. Marinas, however, do use substantial pilings in construction of slips and docks. Most such facilities are still in use, but occasionally one like "Ben's Marina" on Old River has been destroyed, leaving only the pilings as evidence of its existence.



Derelict Duck Blind, Old River

## 6. Power Line Supports

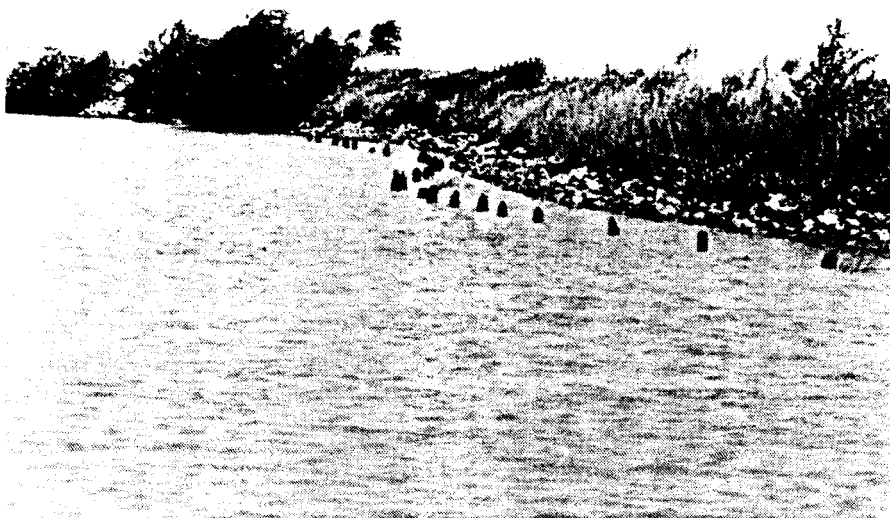
Overhead power lines built through the Delta have had to be kept far enough above the channels to allow the passage of boats. Prior to the installation of modern steel structures, tall wooden poles were used, supported around the base of pilings. Pilings also held guy wires for additional support.

## 7. Siphon or Pump Guards

Drainage and irrigation of Delta tracts requires a complex water management system keyed to the use of drainage pumps and siphons. Pipes from these facilities extend over or through the levees into the waterways near the levees. Such pipes are, and have been, flanked by pilings as protection from damage by boats navigating close to shore. At times major pump stations served much as did camps as a focus of activity in the shipment of crops or as stops on steamer or motor launch itineraries.

## 8. Levee Reinforcement or Repair

A major use of pilings has been in the reclamation process. H. D. Bacon tried to use pilings, with cross pieces tying them together, to hold his peat levees in place on Bacon Island. Pilings have often been driven in a single row along the levees to help reinforce potentially weak spots. In the event of a levee break, pilings in a double row might be driven across the break site and brush piled in between to trap silt and begin to plug the leak. Later a dredger would be used to make more permanent repairs.



Levee Reinforcement Pilings  
Staten Island, North Fork of  
Mokelumme River

On Bouldin Island near Central Landing and around Bacon Island the levee reinforcement pilings on mid-channel berms trace the original 19th Century levee line, while the present levees are located further from the natural waterways.

Levee reinforcement has been regarded as a maintenance practice and thus has not generally been documented. The exceptions are Bacon Island and the site of significant levee breaks, though even in these cases the documentation is generally sketchy. After camp landings, levee reinforcement pilings are probably the most frequently encountered historical artifacts in the study area.

#### 9. Wing Dams

Although only one historic wing dam was encountered in the project area (Georgiana Slough), their use was common on parts of the Sacramento River System. A wing dam extends out from the bank to force flowing water to scour the main channel and thus enhance navigability. Wing dams were constructed of rock and brush held by pilings.

#### 10. Incidental Pilings

Pilings have been driven in connection with ferry sites, bridge sites and in connection with various construction projects. At times an undocumented piling can be found in a location, such as the middle of a channel, that defies logical explanation.

#### Artifacts in the Waterways: Boats and Barges

Various types of vessels - steamboats, tugs, motor launches, barges, scow schooners and more - have used the channels of the Sacramento-San Joaquin Delta. That a number of them have been sunk in the Delta seems probable, but our inspection cruises of the study area revealed only a few boat wreck sites. A partially submerged wooden barge in Bishop Cut was deemed of relatively little historic value by the State Office of Historic Preservation due to its lack of remarkable features and advanced state of deterioration. Even more deteriorated was an unidentified wreck on the North Fork of the Mokelumne River of which only a small portion of what appears to be a hull remains. In Indian Slough adjacent to Orwood Tract, a dredger is submerged, marked by Contra Costa County as a navigation hazard.

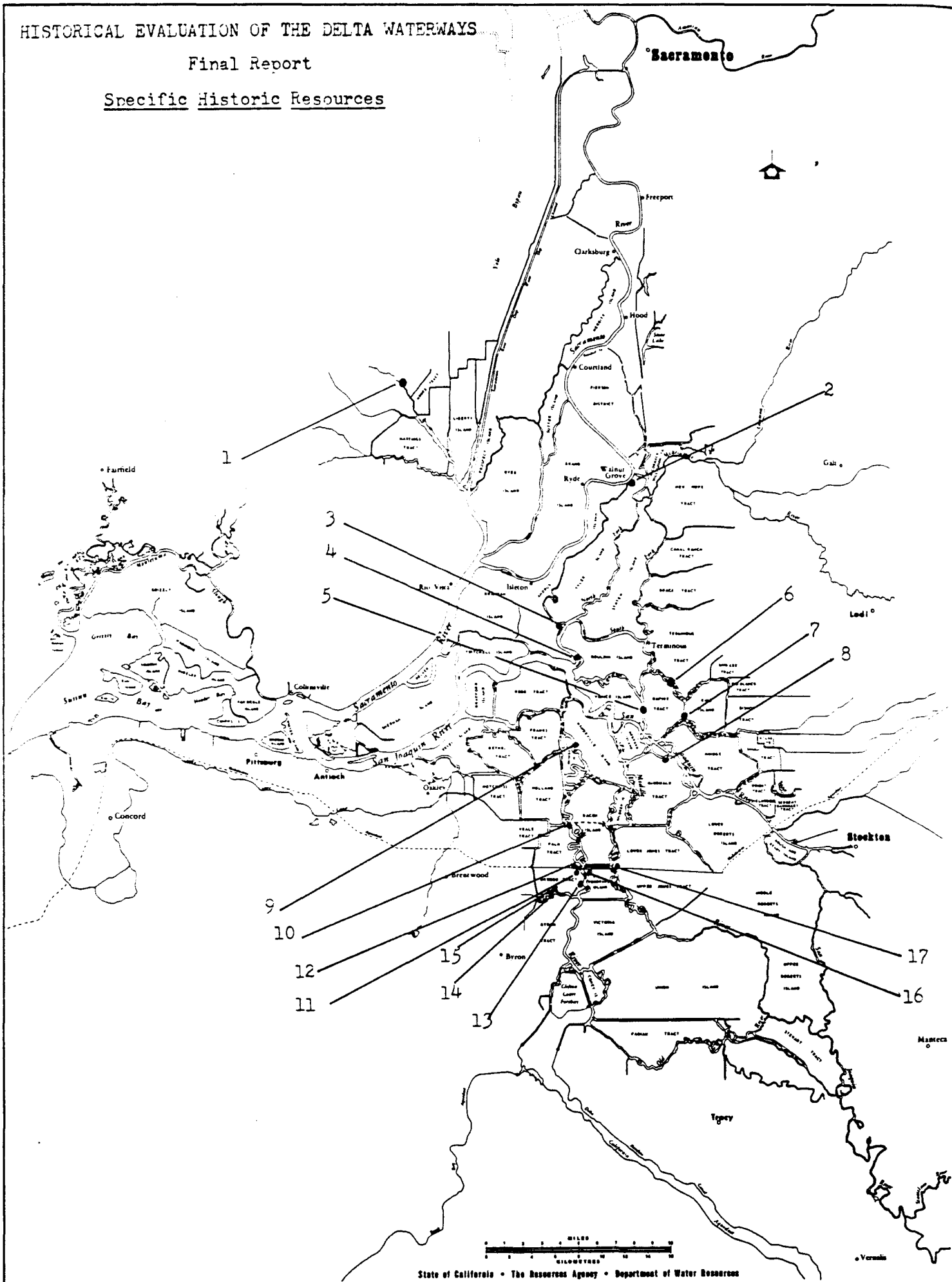
The presence of relatively intact vessels was encouraging. Several barges along Mandeville Island apparently date from about the Second World War, including an interesting multi-story barracks barge. An old potato boat, the Mandeville, rests on McDonald Island, rotting, but substantially intact. We understand, though we have not had occasion for on-site confirmation, that several dredger hulks are moored at the southern end of Honker Cut.



# HISTORICAL EVALUATION OF THE DELTA WATERWAYS

## Final Report

### Specific Historic Resources



The appearance of wrecked or substantially abandoned boats or barges reflects a common practice in the Delta; that of simply mooring vessels no longer needed to berms or in other out of the way places and leaving them there, eventually to sink. The use of the waterways as a graveyard of old boats has been confirmed by more than one of our informants.

#### Artifacts Adjacent to the Waterways

The most notable sites adjacent to the waterways will be discussed in the section on specific historic resources below. In general, they are the remains of canneries, warehouses or residences. To an extent the bridges and ferries that cross the channels are historical sites and the town of Walnut Grove, the only important community in the study area, is a site of considerable interest. Most of the camps, however, that once dotted the Delta have disappeared with the sites marked only by a few trees or perhaps a modern shed or two.

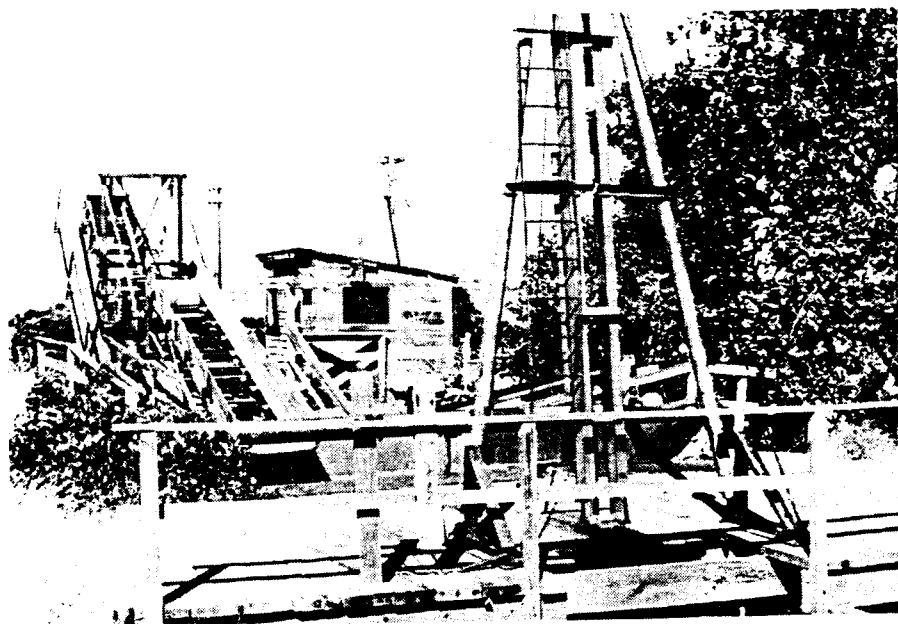
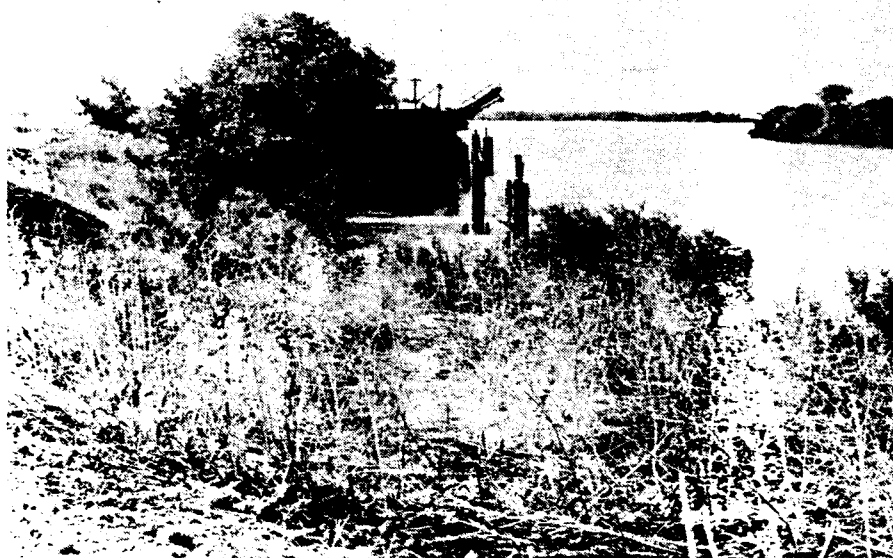
#### Specific Historic Resources

The sites listed below are among the most noteworthy encountered during the project. At almost all of these sites, physical remains are still in existence, although in varying degrees of deterioration. Many of these sites were not subject to disturbance by the State Lands Commission hazard removal program. Further information can be found in the "site specific" reports submitted to the State Lands Commission and the site descriptions and evaluations contained in those reports should be considered an appendix to this report.

The numbers attached to each of the sites listed below correspond to the numbers found on the map of "Specific Historic Resources."

##### 1. Haas Slough Beet Dump

The only intact sugar beet loading dump that we have found is located on private property along Haas Slough in Solano County outside the study area. Its machinery and all appurtenant pilings remain in position and its owner is considering measures to preserve it.



Haas Slough Beet Dump

## 2. Walnut Grove.

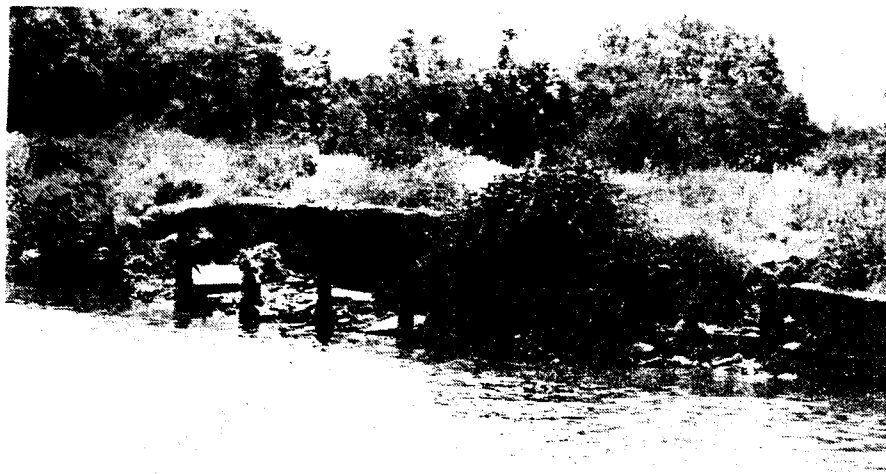
The only important community in the study area is Walnut Grove, located on the Sacramento River at the head of Georgiana Slough. The town owes its start to John Wesley Sharp who arrived in the vicinity in 1850 or 1851 and eventually established the first hotel, first store, the blacksmith shop, post office and a ferry across Georgiana Slough. By 1911, when the Sacramento Southern Railroad arrived, the town boasted a hotel, schoolhouse, hall, church, post office, bakery and butcher shop, two blacksmiths, two saloons, a lodging house and numerous houses and barns in addition to a closely packed Chinese section. When the "Chinatown" burned in 1915, some of the Chinese community relocated to the new town of Locke, just north of Walnut Grove. Walnut Grove was a major transportation center with railroad and riverboat connections and the town's leading man in the early Twentieth Century, Alex Brown, was known as a banker and an important asparagus shipper.

## 3. Golden State Asparagus Cannery Site

In 1908, the Golden State Asparagus Company located a cannery at the junction of Georgiana Slough and the Mokelumne River for the packing of asparagus, beans, pears and peaches, with some of the asparagus grown on the company's own acreage on Andrus Island and Sherman Island. Barges provided transportation until about 1930, when the Sacramento Southern Railroad built a spur to the area from Isleton. The date of the cannery's abandonment is unknown.

Northwest of the cannery site is a grain elevator, warehouse and dock facilities were built along the railroad by the Southern Pacific and by Holly Sugar Company in the 1930's. These wharf facilities were well-developed, having pilings and dolphins for the mooring of barges.

Little remains of either site today and the few remaining pilings were so scattered and deteriorated that they were deemed of negligible historic value and thus subject to removal.



*Site of the Golden State Asparagus Cannery, on Andrus Island, at the Junction of  
Mokelumne River and Georgiana Slough*

### Golden State Asparagus Cannery

(Byron Times Tenth Booster Edition.  
1926-27, p. 124)

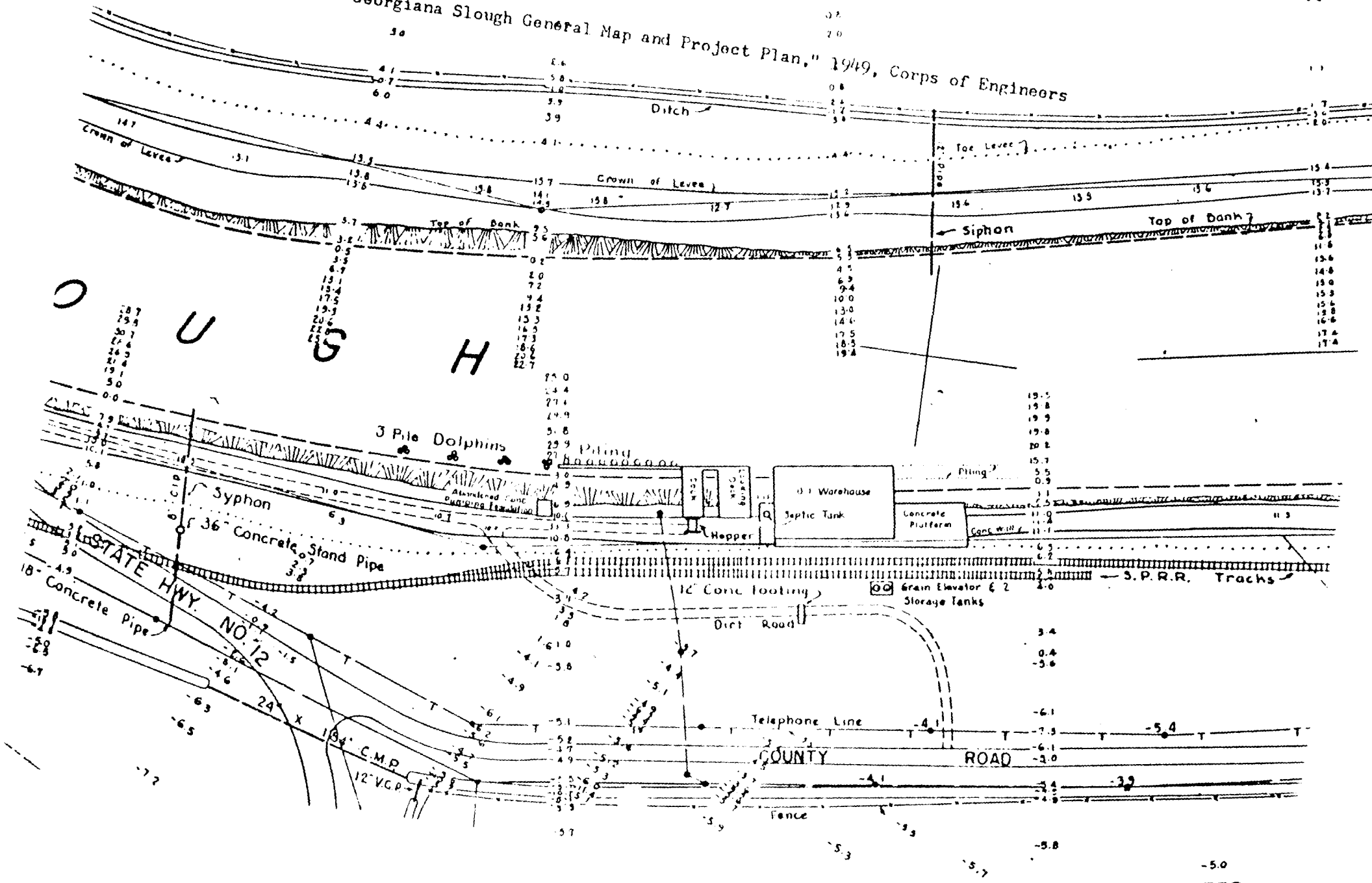
...levator and wharf  
...west of Golden State Asparagus  
Cannery, Andrus Island

THREE

CULTIVATED FIELD

00

xeroxed from "Georgiana Slough General Map and Project Plan," 1949, Corps of Engineers



CULTIVATED

#### 4. Central Landing, Bouldin Island.

Prior to 1904, a community known as Central Landing existed on the western side of Bouldin Island facing the Mokelumne River, but in that year the first of several levee breaks that would plague the island occurred at that location. Photographs of Central Landing after the break show that it had a hotel and various houses and barns and a steamboat wharf. With water depth of 75 feet at the break site, Henry Voorman, an adjacent land owner, sank derelict sailing ships loaded with rocks in an unsuccessful attempt to close the hole. Pilings were driven in a double row as a preliminary step in levee repair, but further breaks in 1906 and 1908 resulted in the abandonment of the island until Lee A. Phillips reclaimed it in 1916-1918. At that time the levee at Central Landing was relocated to the east, leaving the original levee line marked by berms and pilings in the middle of the modern-day Mokelumne River. Many of these pilings are still visible, including some that may have been part of the Central Landing dock. The site illustrates how Delta geography has been altered and realtered in progressive stages of reclamation and is a testimony to the problems involved in reclaiming the Delta islands.

#### 5. Ditcher.

A small wooden hulled ditcher rests partially submerged on a berm north of Venice Island ferry. Ditchers resembled small dredgers but were used inside the islands to dig and maintain drainage canals that could be up to 30 feet wide. California Delta Farms had a fleet of the little craft, powered by a one-cylinder gasoline engine, that could be operated by one man. Ditchers were floated to the island where they were to work and pulled over the levee by means of slides and pulleys. Ditchers are apparently no longer used in the Delta, their work having been assigned to truck mounted equipment. The derelict ditcher might, therefore, justify some attempt at study as perhaps the last of its type.

#### 6. Correia Ferry Site.

A cable-operated ferry was installed across White Slough between Empire Tract and Terminous Tract by 1935. The ferry boat is gone, but the concrete ramps remain. The adjacent house and the general surroundings make the site one of the most attractive of its type in the Delta.

#### 7. Dredger Hulks.

We have been informed that the remains of dredgers once used by California Delta Farms can be seen in Honker Cut near Disappointment Slough, but we have had no occasion for visual inspection of the area.

8. Potato Boat Mandeville.

An old wooden boat bearing the name Mandeville is located on northern McDonald Island. It was built about 1917 or 1918 and was apparently christened the J. W. Higgins after her owner, a Stockton produce buyer. She was originally equipped with a gasoline engine, but was later re-equipped with two 65-horsepower Atlas diesels. An interesting feature of the boat's construction is an elevator near the bow which was used to match landing heights to facilitate the movement of cargo. The J. W. Higgins was sold to the Zuckerman family, farmers on several Delta islands and was renamed the Brothers, possibly in reference to the Zuckerman brothers. She was apparently the last of the Zuckerman fleet and may have been moved to her resting place along Headreach Cutoff just west of the Stockton Deepwater Channel sometime in the late 1950's. The inlet where she was moored has since closed so that the vessel is virtually aground. The Pioneer Museum in Stockton has some of the boat's wooden parts on display and has two photographs of her in service.

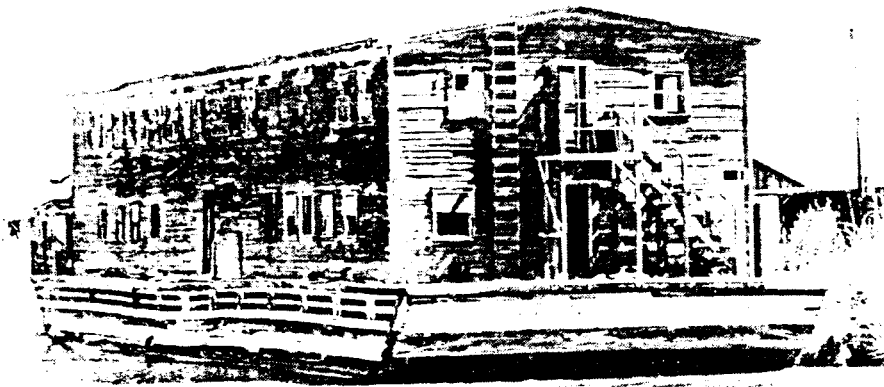


Potato Boat Mandeville on McDonald Island



9. Barracks Barge.

A barge with a two-story barracks structure built upon it is moored at Mandeville Island. The unusual-looking ark probably dates from the 1940's and is the only one of its type we have seen, suggesting that the housing of laborers on barges rather than in camps was a rather rare practice. Although the barge has been unused recently and is, therefore, deteriorating, its basic structure appears sound.



Barracks Barge, Old River, Mandeville Island

10. Bacon Island Levee Reinforcement Pilings.

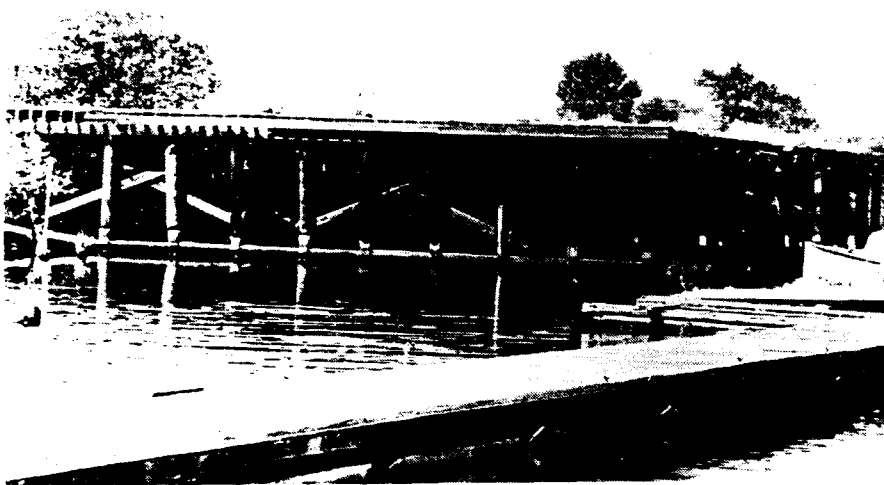
At several sites on both the Old River and Middle River frontages of Bacon Island, light pilings in rows can be seen on mid-channel berms. There were levee reinforcement pilings driven about 1873-1874 by H. D. Bacon in an unsuccessful effort to hold his islands peat levees in place. Reclamation by California Delta Farms in 1913, relocated the levee inland from the original line, leaving the pilings on the berms. Additional detail on Bacon Island can be found in the historical narrative portion of this report. As a Central Landing, the Bacon Island pilings illustrate the problems of reclamation and the manner in which the Delta's geography has been modified.



"Chinese" Piling on Bern  
Middle River, Bacon Island

11. Hickmott Cannery, Orwood Tract

Lee Phillips convinced Robert Hickmott to move his asparagus canning operation to Orwood Tract in 1919 from Bouldin Island, which had been flooded. Machinery was moved in on barges to the northeast corner of Orwood Tract where the cannery was erected largely on the levee. The steam plant was installed on pilings over the water, while two warehouses were constructed on the island side of the levee. The original foundation was of wood, but George Shima, who later took over the plant for use as a potato warehouse, laid new concrete foundations. By 1930, the plant had ceased operation. The foundations, potato loading chutes and wharf structures remain today but the buildings themselves have disappeared.



Orwood Cannery Site, Orwood Tract, Old River

12. Thousand-Foot Wharf.

Portions of a 1,000 foot long wharf survive at southeastern Palm Tract near where the Santa Fe Railway crosses Old River at a site opposite the Hickmott Cannery on Orwood Tract. The wharf once supported a railroad spur and was used to facilitate the transfer of cargoes from barges to railroad cars.

13. Orwood Labor Camp.

Camp No. 6, one of a dozen labor camps on Orwood Tract built by Lee Phillips, is still substantially intact; the only such camp we have found in the study area. Built in the late 1920's or early 1930's it housed up to sixty Chinese workers and was the main "Chinese camp" on Orwood Tract. Besides a two-story home for a foreman, it had several cabins, cookhouse, bathhouse, dining hall and an eight-horse barn. The camp is on private property owned by Leo Fallman, who was in charge of the camp during its operation.



Cookhouse - Mess Hall

Orwood Camp No. 6  
Cookhouse and Barn  
Orwood Tract



Barn



Cookhouse

Bunkhouse

Barn

Orwood Camp No. 6



Bunkhouse

14. St. Mary's Bay Tramway.

About 1870, a tramway was built in Indian Slough to carry hay from higher ground to the west to St. Mary's Bay where it could be reloaded onto scow schooners for a trip to San Francisco that took up to seven days. Mules pulled the cars loaded with hay along the tracks. The tramway was probably in operation as long as St. Mary's Bay was the head of commercial navigation on Indian Slough. It appears that Indian Slough was navigated upstream from St. Mary's Bay in the 1880's probably rendering the tramway unnecessary. Several hundred pilings extending about half a mile along and through a berm remain today to mark the site.

15. Sunken Dredger.

An old dredger is almost totally submerged in the St. Mary's Bay section of Indian Slough adjacent to Orwood Tract. Only a few bolts can be seen above the waterline. Leo Fallman, island superintendent for California Delta Farms and a long-time Orwood resident, reports that it sank between 1900 and 1910, but he does not know its name or any further details.

16. Woodward Island Headquarters.

On the northwest corner of Woodward Island, the large house once used as island headquarters is abandoned and slowly deteriorating. The house is an interesting structure and located near the Santa Fe Railway and the East Bay Municipal Utility District's Mokelumne River Aqueduct, thus making it a site of more than ordinary interest.



Woodward Island Headquarters, Woodward Island, Old River



## 17. Middle River.

A community developed at the Santa Fe Railway crossing of Middle River on the Jones Tracts in the early Twentieth Century. By 1911, 18 structures, including a school, were located at the site. A potato flour mill to process cull potatoes was established there about 1912 and a vegetable cannery followed in the mid-1920's, both built by the Rindge Land and Navigation Company. A ferry connected Lower Jones Tract and Bacon Island north of the railroad bridge. Today Middle River is marked by a large number of generally unidentifiable pilings.

## CONCLUSION

The historic sites and artifacts described above were found in a project involving research in only a portion of the total Delta and even then focusing on the waterways. Much more remains to be done. On the basis of our work in this project, we can predict an equally varied array of artifacts to exist in other Delta waterways and on adjacent islands, with variations depending on the history of the particular areas. We would urge State, Federal and local governments to use every opportunity to catalog the historic resources of the Delta. The enthusiasm with which numerous people of diverse backgrounds assisted us in collecting this information testifies to a lively and widespread interest in the history of the Delta. The area should remain a fertile field of inquiry for professional and amateur historians alike who seek to appreciate the many facets of its unique regional history.

COMPANY	City of Primary Residence (if available)	Officers, Stockholders, Directors NAME																																	
		Atherton, George	Baker, S. L.	Bolt, Frank C.	Bordon, I. L.	Burnett, _____	Burton, George M.	Chandler, C. L.	Cochran, George I.	Davis, W. H.	Donovan, _____	Dudley, H. S.	Findley, _____	Fleischhaker, H.	Gillis, R. C.	Herd, John	Jarboe, P. R.	Lane, F. E.	Lynch, J. F. & F. G.	McClung, S.	Milbank, Isaac	Miller, John B.	Phillips, Lee A.	Rindge F. H. & M. K.	Shaffer, J. W.	Shaugnessy, _____	Sigma, George T.	Staats, William R.	Wallace, A. J. & F.	West, F. A.	Weyl, E. M.	Williams, N., R.E., W.J.	Wolf, William H.	Zuckerman, M, HG, RC	
Victoria Land Co. (1933)																																			
Empire Farms, Inc. (1931)																																			
Old River Farms Co. (1920)																																			
Productive Properties, Ltd. (1920)																																			
Woodward Island Co. (1912)																																			
Victoria Farms Co. (1913)										X																									
California Delta Farms Inc. (1912, 1916)																																			
Weyl-Zuckerman Co. (1907)																																			
Empire Navigation Co. (1906)																																			
Rindge Land & Navigation Co. (1905)																																			
Holland Land and Water Co. (1905)																																			
California Reclaimed Lands Co. (1905)																																			
Middle River Navigation & Canal Co. (1902)																																			
Middle River Farming Co. (1901)																																			
Conservative Life Insurance Co. (1900)																																			
Old River Land and Reclamation Company (1896)																																			
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KEY TO CITY ABBREVIATIONS:  
 Berk. = Berkeley  
 LA = Los Angeles  
 SF = San Francisco  
 St. = Stockton